

International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

Volume 2, Issue 3, November 2022

# **Digital Gram Panchayath Services**

Prof. K. K. Joshi<sup>1</sup>, Vijay Bade<sup>2</sup>, Prasad Bansode<sup>3</sup>, Pranay Awchat<sup>4</sup>, Akshay Kankriya<sup>5</sup>

Professor, Department of Computer Engineering<sup>1</sup>
Students, Department of Computer Engineering<sup>2,3,4,5</sup>
Sinhgad Institute of Technology and Science, Kusgaon (BK), Pune, Maharashtra, India

**Abstract:** The main objective of this application is for better delivery of Citizen Services in the village through computerization of application for the services of the gram panchayath. Gram panchayat is a decentralized institution managing the application and providing the information about services in the gram panchayath. The proposed system will be the provide an application for various services and track the application status. E-Services for gram panchayath aim is to provide the information about the services or schemes and application for each services of gram panchayath and it also view and update by the staff of gram panchayath.

Keywords: Gram Panchayath

#### I. INTRODUCTION

A Gram Panchayat is the cornerstone of a local self-government organisation in India of the Panchayati raj system at the village or small town level, and has a Sarpanch as its elected head.

Gram Panchayats are Panchayats at Base Level in Panchayat Raj Institutions (or PRIs), governed by the 73rd Amendment, which is concerned with Rural Local Governments.

- Panchayat at District(or apex) Level
- Panchayat at Intermediate Level
- Panchayat at Base Level

The Sarpanch, Members and Gram Sevak represent the voice and opinion of the village people on behalf of the Gram Panchayat to the Taluka and Zilla level by attending the meetings or sending the official records and Panchayat and Rural Development Minister of the state is the minister who controls all the Gram panchayat Department of the state. Regulatory and Administrative Functions:

- 1. This institute solving the disputes of village people as individual or groups.
- 2. They control the behavior of people of people. Collect their opinion about various programmes.
- 3. Gram Panchayat implements the official programme given by the authorities.
- 4. Conduct regular meetings and keeps records for various departments.
- 5. The measures are enforced for the desired safety and sanitation of the village people.

# **Service or Development Functions:**

- 1. Collection of taxes like house etc.
- 2. Promotion of educational, health, agriculture and communication facilities.
- 3. Providing health and drinking water facilities whenever the village people need.
- **4.** Produce authentic documents regarding birth, death or property details of village people.
- 5. Looks after general welfare and immediate development of village e.g. road, fight, bazaar, community facilities etc.

It is basic, first formal democratic institution at the village level. The chairperson of this unit is called as Sarpanch. It is primary unit of local self-government. Gram panchayat is a cabinet of the village elders, directly elected by the adult citizens of the village. There are 8 to 10 ward punches, two or three coopted members, who constitute the body of Gram Panchayat; they are consists of 8 to 10 villages. There are three functional sub committees which meet four times every month to decide agricultural production programme, cottage industry programme, finance and budget and social amenities in Gram panchayat area.



# International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

# Volume 2, Issue 3, November 2022

The members of the Gram Panchayats have tenure of five years and are directly elected from wards while the Sarpanch is elected by the members. There is provision for reservation of seats for women and for scheduled casts and scheduled tribes. There is Gram Sabha for each panchayat and the Sarpanch is required to conduct Gram Sabha meetings at least once in six months. Also Sarpanch is required to conduct meeting of the members of the Panchayat once in a month.

# Powers and Functions of the Sarpanch:

- o To convene and preside over the meetings of the Gram Panchayat.
- To conduct and regulate and be responsible for the proper maintenance of the records of the proceedings of the meetings.
- o To execute documents relating to controls on behalf of the Gram Shasan.
- o To be responsible for the proper custody of all records and documents, all valuable securities and assets belonging to the Gram panchayat or belonging to the Gram shasan.
- o To be responsible for the proper working of the Gram panchayat as required by or under the Act.
- To exercise supervision and control over the acts and proceedings of all officers and employees of the Gram panchayat.
- o To have authority to enter into correspondence on behalf of Gram panchayat.
- o To order preparation of all statements and reports.
- o To exercise such other powers, discharge such other duties and perform such other functions as may be conferred or imposed on or assigned to him.

# **Power of Gram Panchayat Members**

- To move resolution or question on any office bearer on matters connected with the administration of the Gram Panchauyat.
- o To exercise inspection overt all works undertaken by the Gram Panchayat.
- o To supervise all institutions working under the direction, management and control of the Gram panchayat.
- o To bring to the notice of the Sarpanch the irregularities if any, noticed during such inspection.

B.S Bhargava in his study "Grass roots Leadership" stated the Gram Sabha is essentially viewed as an open forum for general review and scrutiny of work done by the Panchayat. Because its views or discussions are not binding on the Panchayat, they have not come to occupy a pivotal position in the Panchayat systemL1. Siva Ramaprasad V. (1981) in his study 'Panchayat of Hyderabad Region' reported that Gram Sabha meetings were attended by not more than four percent of the members in the viuage ". G. Shahabir Cheema and Dennis A. Rondinelli describe different types of decentralisation.

According to them "It is common to distinguish between different forms of decentralisation, namely deconcentration, delegation, devolution and privatisation"L3. However, their studies have not envisaged scenarios where popular assemblies play a crucial role in grass root level decision-making. The G.V.K Rao Committee(1985), recommended Gram Sabha for each village consisting of all voters of a village. According to this Committee, Gram Sabha should meet as often as necessary, but the interval between any two consecutive meeting should not be more than six months.

The Committee suggested that the identification of beneficiaries should be done in Gram Sabha meetings 14. The Committee visualised the Gram Sabha as the embodiment of direct democracy 15. A case study of Gram Sabha in Dharwad district of Karnataka (1990) conducted by V.T Patil and A.T. Kittur reveal thaf "Inspite of Governments' and Zilla Parishads' continuous efforts by way of circulars, orders and telegrams to activate the Gram Sabha, still the fact is that, in most of the talukg Gram Sabhas are not functioning as per the statutory requirement "I6.

Khanna B.S. in his study on 'Panchayati Raj in India', reported that it is disappointing to find that the Gram Sabhas, which have been statutorily empowered to scrutinise the annual administrative reports and accounts of the Panchayats and also consider proposals for fie& taxes etc., have not been meeting at all, inspite of the legal provision that the Sarpanch would lose his position if he fails to call at least two meetings of the Gram Sabha annually 17. Abdul Aziz (1992) in his study on 'Decentralisation: Mandal Panchayat System in Karnataka', stated that the Gram Sabha meetings were held somewhat regularly in the first year and, in due course, the frequency of meetings and the number of villages where meetings were held, declined and attendance also was not encouraging Is. A micro-level study of the working of



#### International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

# Volume 2, Issue 3, November 2022

Gram-Sabha in Karnataka by B.S. Bhargava and Jos C. Raphael found that "the structural arrangement for people's participation in the decentralized planning process through Gram Sabha at grass root level became almost a defunct mechanism" 19.

In Kerala, Gandhi Yuvamandalam(1996) conducted a survey I regarding the functioning of Gram Sabhas. The study was limited to the first two Gram Sabhas held in 1996 and the sample was small even though it was drawn from all parts of Kerala. They used the response sheet of young Gandhian workers who had participated in the two Gram Sabhas or were reliably informed about the proceedings, to arrive at the findings. The study reveals that there were Gram Sabhas which could not reach quorum and it also stated that in many wards, there was only one Gram Sabha meeting in place of the two that should have been convened 20 To understand the working of Gram Sabha a preliminary study was conducted in Kottayam District, Kerala, in 1997. It shows that attendance is vely poor and hence qualitative participation of people is almost negligible. The study also reveals that women have not been coming forward to express their opinion before public gatherings. In the first Gram Sabha meeting held between January and June 1996, people attended the meeting out of curiosity. Some ward members do not want more people to attend the meetings for fear of rampant criticism of their work ". In Kerala, the Committee on Decentralisation of Powers (Sen Committee) recommended measures to create participatory community structures to enable the poor to have a say in development matters; these include formation of neighbourhood groups and h:: level ,W.' organisations.

The Committee has focussed on certain critical areas. The final report states that the comer stone of decentralised democratic governance is people's participation anywhere in the world and not even consultation in participation. It also recommended to strengthen people's institutions like Gram Sabhas, Ward Sabhas and Ward Committees 22. On the basis of the analysis of Gram Sabha meetings, S.P. Jain came to the following conclusion: "The level of participation of people differed a great deal making the proceedings either dull or unproductive. Sometimes a majority of them were indifferent to the discussion and were content to attend it for a while and then leave in the middle.

The meetings were also, at times, utilised by rival groups in criticising, ventilating, exposing and for condemning some of the actions of Panchas and thereby settle their social and political scores by highlighting facts apout misappropriation of funds and other actual commission and other acts of commission or omission" 23. Thomas Isaac, quoting figures available with the State Planning Board in co~ection with the People's Planning programme, gives us an idea of the role of Gram Sabha in identiQing the development problems of the Panchayats and concludes that the Gram Sabha has taken root in eral la'^. A recent book, 'Panchayathurajum Sen Cornmittiyum' (Malayalam), published by Centre for Ilural Management, Kottayam, based on the recent experience of Gram Sabha in Kerala, warns against the approach of the Committee on Decentalisation (upon whose recommendation the Kerala Panchayati Raj Act 1994 was amended in 1999) to strengthen the Gram Sabha and advocates strengthening of the Panchayat as the first step towards accentuating decentralisati~n~~.

S.P. Jain has emphasised the need for action plan for awareness generation about working of Gram Sabhas. He stated: "it has been observed over the years that the performance of the Gram Sabha has suffered due to lack of awareness among the people about the concept and utility of the institution of Gram Sabha, and their own role in making it successful. Any effort directed towards strengthening this institution, therefore, requires a very serious action plan for awareness generation about various aspects of working of Gram Sabhas among the people" 26. I Various articles regarding Panchayati Raj and Gram Sabha published in Kurukshetra are also helpful in understanding the position and working of Gram Sabhas in different states.

Among them, the article written by John and Chathukulam examines the relationship between Gram Panchayat and Gram Sabha and in line with the Diwakar Committee recommendations and their earlier studies cautions against investing Gram Sabhas with more powers. It says, "experience fkom Karnataka, Andhra Pradesh, Tamil Nadu, Lakshadweep Goa and Kerala suggests that these institutions are unlikely to function according to the expectations of proponents of decentralisation who accord a pre-eminent position to Gram sabhawz7. It is also understood Mahipal in an article focuses on the powers and authority devolved to the Gram Sabha in the fifth Scheduled areas of the country.

He stated: "The Extension Act is a watershed in the sphere of devolution of powers and authority at a local level, as it has empowered this corporate body in taking decisions about all vital issues affecting society and econopy of the tribals"". Regarding the functions of Gram Sabha in Karnataka, Meenakshisundaram stated: "Gram Sabhas have not being functioning in most parts of Karnataka. Even where they functioned, the attendance was thin and not many



# International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

# Volume 2, Issue 3, November 2022

Scheduled Castes and Scheduled Tribes or women members attended the meetings. In almost all cases Gram Sabhas did not discuss development programmes relating to the village and in some they were reduced to mere avenues for making complaints and mud-slinging. Even the lower level officials did not attend the Gram Sabha meetings and office bearers of the Gram Panchayat are also not keen to convene the Gram Sabha meetings as they found it inconvenient to face the people without meeting any of this basic demands" 'O . P.C. Mathur in his study about Gram Sabha in Rajasthan says, "ever since the Antyodaya Scheme was launched during 1977-80, the Rajasthan Government had been utilising the Gram Sabha as a public forum for selecting the beneficiaries of the Anthodaya scheme", which is a creditable a~hievement Sujit K. Dutta in an article cited an example of the success of the Gram Sabha in Tripura.

He stated: "The institution of Gram Sabha is dormant in most of the North Eastern States precisely because its peer group i.e., the Gram Panchayat is non-existent. However, in Tripura the Gram Panchayat does exist and it is the executi"e body of the Gram Sabha. Here, the members of the Gram Sabha actively participate in the entire village affairs and developmental activities. Even in implementation part of any scheme, the Gram Sabha ensures community participation, collective decision-making, monitoring and e~aluation"~. Regarding the relationship between Gram Sabha and Panchayat, George Mathew stated: "The Panchayats will be effective only if Gram Sabhas meet regularly with maximum participation of the people. At the same time, Gram Sabha will be effective only if the Panchayati Raj institutions are strong" 33.

# 1. Objectives

E-Services for gram panchayath aim is to provide the information about the services or schemes and application for each services of gram panchayath and it also view and update by the staff of gram panchayath.

# 1.2. System Specifications Hardware Requirements

Windows OS

# **Software Requirements**

Front End: HTML5, CSS3, Bootstrap

Back End: PHP 7.4, MYSQLControl End: Angular Java Script

#### **Tools:**

• xampp-win64-7.4

# II. LITERATURE REVIEW

The institution of Gram Sabha has been in vogue in most states in India for long. With the passing of the 73rd amendment to the constitution, the body has become an integral part of Panchayat Raj, the third stratum of Government. The record of Gram Sabha as an assembly of village adults has not been enviable anywhere in the countty. However, the amendment has made the Gram Sabha a mechanism of direct democracy, one in which the villagers exercise voice in the affairs of their locality. The extent to which the powers have been devolved to the Panchayats will have a direct bearing on the extent of matters over which the Gram Sabha can exercise some control. With the declaration of 1999-2000 as the year of the Gram Sabha by the Union Minisby of Rural Development, the importance of the body has been publicly affied. However, the status of village assembly of all voters in our representative democracy is yet to be defined and established on a fmn footing. One reason for this lies in the traditional neglect of popular bodies in liberal democracy as part of systems of local governance although direct democratic devices based on citizens initiatives find some treatment within it.

Unlike other states in India, Kerala has been lagging behind in the field of Panchayati Raj and decentralisation of powers. The very concept of a Gram Sabha was seemingly inconceivable in the state until recently. Reforms related to Panchayat Raj undertaken in the pre- amendment phase had not envisaged Gram Sabhas. Because of the mandatory nature of the amendment, the Kerala Panchayat Raj Act 1994 included Gram Sabha as an integral component of the



#### International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

# Volume 2, Issue 3, November 2022

Panchayat system. However the way the body is finding its due place withii the Panchayat system, without hangovers of the past, is worthy of study and examination. While the absence of the hang over of the past may enable the body, at least theoretically, to take off with a bang, the absence of past practice also adds to confusion regarding its legitimate role within the Panchayat set up. The Gram Sabha seeks to actualise the concept of participation both in the developmental and instrumental aspects. These two aspects fade off into each another making them indistinguishable in practice. In its developmental sense, it is seen as an end in itself, as fulfilling the ideal of democracy, as leading to empowerment of the people at the grassroots.

Strengthening local government is generally positively related to enhancing participation. However, it depends much on the nature of decentralisation effected and the attitudes of the public to the institutions that come into being. Instrumentally conceived, it is expected to mould development in tune with the desire of the people for whom it is meant and at the same time ensure efficiency and resource availability through participation and co-operation. Often scholars talk about generating social capital as long-term investment in development. Participation is also seen as essential for sustainable development, equity and social justice. The latter being a cardinal purpose underlying the constitutional amendment, can be ensured through participation of the people in bodies like the Gram Sabha.

The enactment of the 73rd Constitutional Amendment Act and the subsequent Kerala Panchayat Raj Act has brought to frontline significance the study of grass root democratic process. This change in the Indian political system is the result of a growing conviction that centralised government cannot achieve growth and development in a society marked by an absence of space for expression of people's initiative. The significance of the study lies also in the fact that the 73rd Constitutional Amendment Act has made it obligatory to hold regular meetings of Gram Sabha the periodicity of which is determined by each state. This enables the rural people to be in touch with their representatives in the village Panchayat. It is true that voters cannot participate fully in the decision-making process as in direct democracy. Gram Sabha is the only body, which at least symbolically conveys the idea that political sovereignty rests with the people. The number of persons attending the Gram Sabha, the nature of the topics discussed, the quality of discussions and the intensity of participation are important factors contributing to the success of Panchayati Raj Institutions. As this is the only body with a direct bearing on civil society, the functioning of this body and the strategies for strengthening it should be explored in detail.

The Gram Sabha invested with statutory authority to suggest action and seek explanation from the elected representatives of the Gram Panchayat, is a new experience in Kerala. With the introduction of participatory decentralised planning popularly known as "People's' Planning", Gram Sabha secured an opportunity to formulate plans on the basis of the realities of the village economy, ecology and socio-economic conditions of the population. This turn of events in the state polity, administration and society need an in depth probe. The experience of the past three years at grass root level indicates that there are several problems and hurdles ahead in the evolution of the Gram Sabha as a vibrant institution.

An attempt is made in this chapter to review the available literature on 'Gram Sabha'. Only the relevant contributions are briefly presented. There is a diffuse of body of literature on Panchayati Raj Institutions in India. There have been historical and regional studies done at the micro and macro levels. The Programme Evaluation Organisation (PEO) in 1960, found that "no meetings of the Gram Sabha were ever held, budgets are not presented to it for its approval. The meeting initially called had to be adjourned for want of quorum. The main reason for poor attendance was nonparticipation of female adults 2.

On 26th January 1963 the Ministry of Community Development and Co-operation set up a study team to examine and report on "The Position of Gram Sabha in Panchayati Raj Movement" under the Chairmanship of R.R. Diwakar, a former member of Rajya Sabha, Union Minister and Gandhian. The Diwakar Committee Report found that "even in those states where the institution of the Gram Sabha has been introduced by statutes as early as 1947, it cannot be said that the institution had been functioning there in any real sense of the term. Generally these Gram Sabha meetings are thinly attended and a quorum is seldom achievedn3. It also revealed: "One very important reason why the Gram Sabha failed to attract the villagers is that by and large no effort has been made to discuss and fmd solutions for their felt needs and basic problems. In the present, a villager will not get interested in matters of village development unless his basic problems are attended to. In areas where this has been tried even to a limited extent, the attendance at these meetings have improved and the villager has shown greater interest. It will, therefore, be necessary to develop the Gram Sabha as



# International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

# Volume 2, Issue 3, November 2022

a forum where people could discuss all their problems relating to the village. For these discussions to be purposeful, it is necessary to transfer some of the subjects relating to non-development activities of semiregulatory character to the Panchayats" 4. The Committee also reported about the Gram Sabha meetings by saying that "there is considerable lack of intelligent participation at these meetings even by the 'few who are present. The Sarpanch or the Mukhia conducts the proceedings" '.

A case study by M.V. Mathur, Iqbal Narain and V.M Sinha (1966) conducted in the Jaipur District, Rajasthan shows that the Gram Sabha turns out to be loosely organised, meetings of a handful of persons who talk amongst themselves about many general topics 6. Raghubir Sahai (1968) in his study "Panchayati Raj in India" observed that no Gram Sabha meetings were held and even if a meeting was held, people did not evince any enthusiasm for these meetings 7. According to Henry Maddick the causes of failure of Gram Sabha as an institution are numerous. It extends from the apathy of people to the procedural constraints and social reasons while conducting the Gram Sabha meetings According to the Ashok Mehta report the village committee members should convene the Gram Sabha at least twice in a year to explain to the members the nature of work to be canied out in the village for the ensuing year and also to enlist feedback from the peopleg. Inamdar N.R. in his study observed that Gram Sabha in the two villages that he studied were largely attempts to evoke popular enthusiasm in Panchayat affairs, but they were not as successful as they were expected to be

After review of the role and responsibilities of the Gram Sabha in the State Panchayat Acts, M. Aslam stated: "In order to revitalize grassroots democracy the Gram Sabha has to develop as an institution where common people can get an opportunity to participate in the process of self governance. It is, therefore, essential to take necessary steps for creating conditions conducive for the process of self-governance to flourish at the grassroots level.

These conditions may include the Gram Sabha for every village, periodic meetings, own procedure for conducting Gram Sabha and its business, authority to take up development programmes at the village level and participation of disadvantaged groups" 34. There is a very small body of literature on weaker sections and women's participation in Gram Sabha meetings, spread here and there as part of a book or in the form of articles in Journals. Among them Journal of Rural Development, Administrator, Kurukshefra, and Gandhi Marg deserve special mention. But the survey of literature on working of Gram Sabhas in Kerala shows that no empirical studies have been made so far. The Final Report of the Committee on Decentralisation of Powers, 1997 (Sen Committee), articles in newspapers and the handbooks published by the State Planning Board, 'The Panchayati Raj', published by the Local Administration Department of Kerala, Development Reports of various Panchayats, Blocks and District Panchayats are helpful in understanding the working of Panchayati Raj Institutions in Kerala. There has been a spurt in such publications following the launching of the "People's Campaign for the 9~ Plan".

Most of the studies mentioned above are works dealing with institutions of Panchayat Raj in general. Hence reference to Gram Sabha is less focussed. The Diwakar Committee was the only committee, which examined the situation of Gram Sabha Grom an all India perspective. While many findings of the study do hold good even now, there has been significant changes in the socio-economic situation in the country as well as in the composition and powers of the Panchayats. For example, statutory I reservation for women, Scheduled castes and Tribes and, in some states, for backward classes also exist in the Panchayats. This may have an enabling role in helping such sections of society to assert themselves in participatory bodies like Gram Sabha.

The history of Panchayat Raj Institutions is rooted in ancient Indian history. Malviya (1956) explains the historical and ideological background of the Grama Panchayats in India from time immemorial, and focuses on how the village Panchayats in this ancient country developed into a sound system of democracy in accordance with our indigenous traditions and culture. The author concludes with a suggestion that the village Panchayats in India could really succeed in bringing about decentralization of economic and political power under conditions of social and economic equality The Balwantrai Mehta Committee Report (1957) examined the working of the development projects and national extension service with a view "to economy and efficiency."

It was found that few of the local bodies at a level higher than the village panchayats did not show any interest in this work and even the panchayats did not come to the fields to any appreciable extent. Finally, the movement succeeded in stabilizing local initiatives and in creating institutions to ensure continuity in the process of improving the conditions in rural areas. The committee report suggested a three-tier system of rural local government, the tiers linked by a system of



# International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

# Volume 2, Issue 3, November 2022

elections. These three tiers were the Gram Panchyath at village level, Panchayat Samithi at block level, and Zilla Parishad at district level. Singh (1987) presents a historical view of the Panchayat Raj Institutions in India, together with a discussion on the theoretical, organizational, and functional dimensions of the Panchayat Raj. He concludes that Bihar was one of the first states in India to enact legislation on Panchayat Raj (1947), yet regular elections could not be held and devolution of power was not possible.

The state government played with the idea of the devolution of power as it pleased the politics administrative bureaucracy. The Panchayat Raj could not succeed even in the eight districts of Bihar where it had been launched, and the devolution of power to the grassroots level remained a misnomer. This study concludes that the gap between theory and practice remained. However, there are some striking points of the Panchayat Raj system in Bihar. The author refers to the Panchayats as a training ground at the grass roots level which provides an opportunity for the transformation of local leadership into district and state level leadership. The Panchayat remained an institution led by local bureaucracy, and hence the self-dependence and self-reliance among the rural masses could not develop.

And without the necessary financial backing the Panchayat remained hollow in its functions. The attitude of the state government towards the Panchayat Raj Institutions remained generally indifferent. He also quoted that, Jayaprakash Narayan had cherished the idea of strengthening the grass roots democracy for quite a long time practically since the Sarvodaya Movement in 1954. He always stressed the requirements of decentralization. He emphasized repeatedly that Panchayat Raj should be strengthened. He was of the view that: A proper balance must be struck between a state government on the one hand and organs of local selfgovernment, or Panchayat Raj Institutions on the other. For this purpose, it may be necessary to provide for these Panchayat Raj Institutions in the Constitution itself and clearly shortlist their powers, so that they may exercise legitimate power and remain answerable to their constituents.

Mahatma Gandhi had envisaged self-sustained and self-sufficient village republics capable of managing their affairs. The Panchayat Raj as postulated by Mahatma Gandhi, was given a place in Article 40 of the Indian Constitution under the heading Directive Principles of State Policy. This was really an integral part of the concept of Pooran Swaraj and Gram Swaraj as being two integrally inter-related concepts. His concept of (Pooran Swaraj) means several levels of autonomous development of local communities.

It also meant that there has to be growth and development of the individual of the local community in every walk of life. Then Pandit Jawaharlal Nehru proclaimed at Nagore, a place in Rajasthan that Panchayat Raj institutions were going to be the bedrock for grassroots democracy. He thought that unless this kind of grassroots democracy was not developed there would be a lack of participation in the democratic process which would also be reflected in an equal or greater lack of participation in the development process. He, therefore, thought of Panchayat Raj Institutions as integral both to democratic self government and to the democratic development at the grassroots level and thus it was conceived.

# 2.1 Existing Solution

In the present scenario, various government services are published in print media and advertised by the respective departments. It is often difficult for people to get the relevant information and approach the officials for availing the services. Due to lack of proper communication among various departments and officials, often the purpose of the schemes is not achieved. People do not get to know about the schemes and do not benefit from them. Application process is doing manual and people do not getting the proper application status.

# 2.2 Proposed Solution

The Gram Panchayat will have so many functions like introducing different kinds of services and provide the information about the services or schemes and application for each services of gram panchayath and it also view and update by the staff of gram panchayath, so the people can know about services without entering into the Gram Panchayat office.

# III. OVERALL DESCRIPTION OF THE PROPOSED SYSTEM

#### 3.1 Module Description

Here user can register with their own Adhar Id and they can post their application to gram panchayat. These applications are receive by Staff. After once complete their verification process that application pass to Officer. Office

Copyright to IJARSCT DOI: 10.48175/568 224
www.ijarsct.co.in



# International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

# Volume 2, Issue 3, November 2022

only can give approval for User request. If all attached document are maintain correct manner they can approve for this application otherwise its will be rejected.

#### 3.2 System Features

In the life of the software development, problem analysis provides a base for design and development phase. The problem is analyzed so that sufficient matter is provided to design a new system. Large problems are sub-divided into smaller once to make them understandable and easy for finding solutions. Same in this project all the task are sub-divided and categorized.

# **System Modules:**

- User
- Staff
- Officier

#### **Module List:**

#### Officer/Admin

- Login
- Create Services
- Update/Delete services
- Update application status

#### Logout

- User
- Register
- Login
- Search services
- Apply Services
- My application status
- My profile
- Logout

# Staff

- Login
- View services
- Update Application status

# **Module Description:**

#### User:

Users are the people of gram panchayat they view services and apply application for services they provide by gram panchayath and they can view application status.

# Gram panchayath staff

Gram panchayath staff adds and removes the services of gram panchayat and the staff maintains the reports of application of each services and they will send application to chief officer of gram panchayath and they will add application status

# Gram panchayath officer

Gram panchayath officer adds and removes the services of gram panchayat, they view and send back application, approve and select applications.



# International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

Volume 2, Issue 3, November 2022

#### IV. DESIGN

Design is the first step in the development phase for any techniques and principles for the purpose of defining a device, a process or system in sufficient detail to permit its physical realization.

Once the software requirements have been analyzed and specified the software design involves three technical activities - design, coding, implementation and testing that are required to build and verify the software.

The design activities are of main importance in this phase, because in this activity, decisions ultimately affecting the success of the software implementation and its ease of maintenance are made. These decisions have the final bearing upon reliability and maintainability of the system. Design is the only way to accurately translate the customer's requirements into finished software or a system.

Design is the place where quality is fostered in development. Software design is a process through which requirements are translated into a representation of software. Software design is conducted in two steps. Preliminary design is concerned with the transformation of requirements into data.

#### 4.1 UML Diagrams

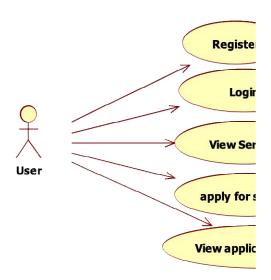
UML stands for Unified Modeling Language. UML is a language for specifying, visualizing and documenting the system. This is the step while developing any product after analysis. The goal from this is to produce a model of the entities involved in the project which later need to be built. The representation of the entities that are to be used in the product being developed need to be designed.

There are various kinds of methods in software design:

- Use case Diagram
- Sequence Diagram
- Collaboration Diagram

# 4.1.1 Usecase Diagrams

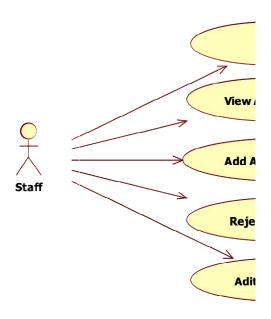
Use case diagrams model behavior within a system and helps the developers understand of what the user require. The stick man represents what's called an actor. Use case diagram can be useful for getting an overall view of the system and clarifying who can do and more importantly what they can't do.

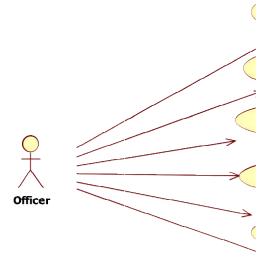




# International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

Volume 2, Issue 3, November 2022





Use case diagram consists of use cases and actors and shows the interaction between the use case and actors.

- o The purpose is to show the interactions between the use case and actor.
- o To represent the system requirements from user's perspective.
- o An actor could be the end-user of the system or an external system

# 4.1.2 Activity Diagram

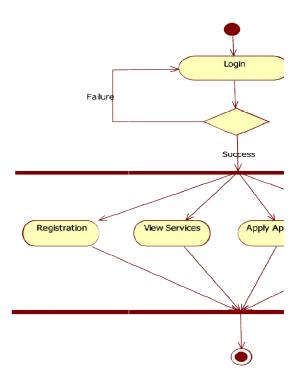
Activity diagram is another important diagram in UML to describe dynamic aspects of the system. Activity diagram is basically a flow chart to represent the flow from one activity to another activity. The activity can be described as an operation of the system. So the control flow is drawn from one operation to another.



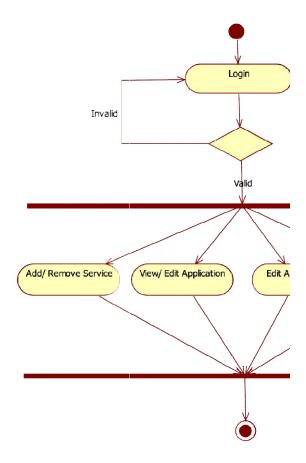
# International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

Volume 2, Issue 3, November 2022

User:



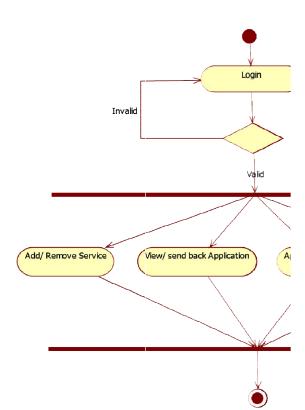
Staff





# International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

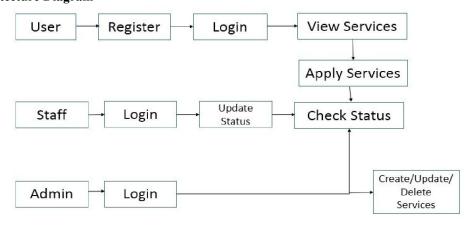
Volume 2, Issue 3, November 2022



# 4.1.3 Table Design

- Admin & Staff Login
- User Register & Login
- Services Details
- My Application Details

# 4.1.4. Architecture Diagram



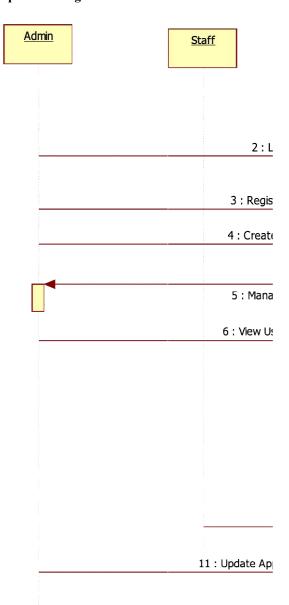


# International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

Volume 2, Issue 3, November 2022

DOI: 10.48175/568

# 4.1.5. Sequential Diagram

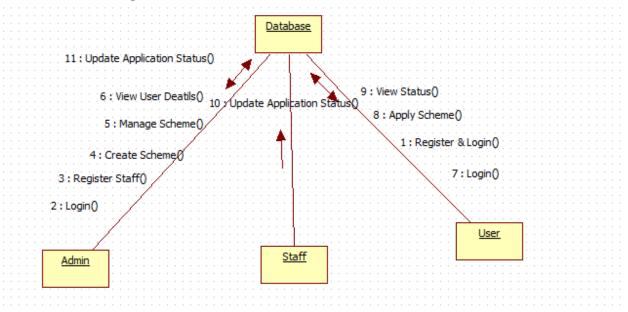




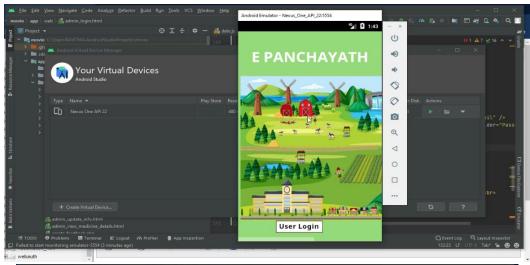
# International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

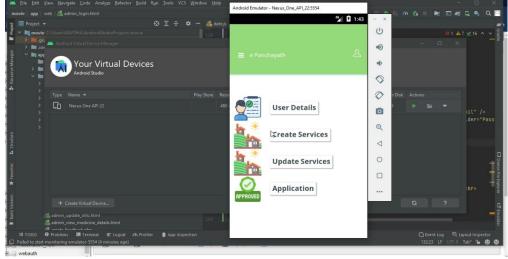
# Volume 2, Issue 3, November 2022

# 4.1.6. Collaboration Diagram



# V. OUTPUT SCREENSHOTS



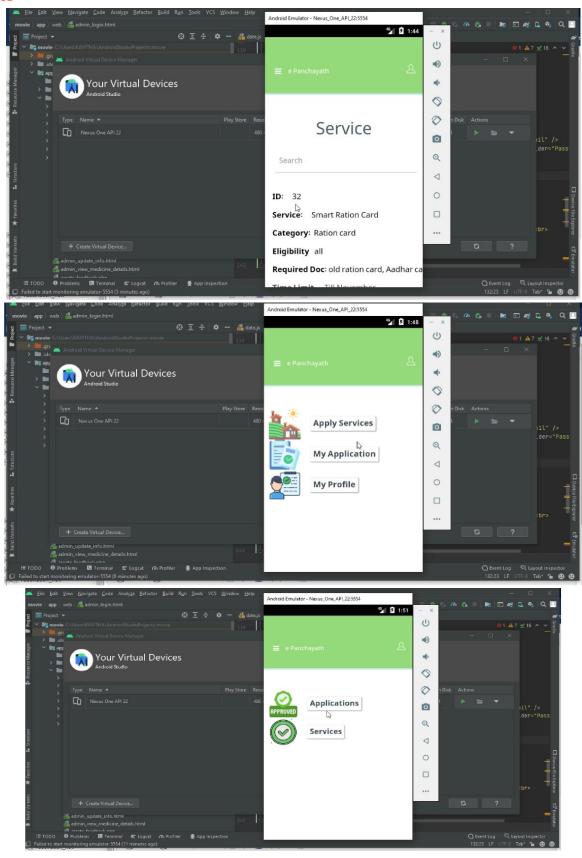


231

# IJARSCT Impact Factor: 6.252

# International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

Volume 2, Issue 3, November 2022





# International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

Volume 2, Issue 3, November 2022

#### VI. IMPLEMENTATION DETAILS

#### 6.1 Introduction to Html Framework

Hyper Text Markup Language, commonly referred to as HTML, is the standard markup language used to create web pages. Along with CSS, and JavaScript, HTML is a cornerstone technology used to create web pages, as well as to create user interfaces for mobile and web applications. Web browsers can read HTML files and render them into visible or audible web pages. HTML describes the structure of a website semantically along with cues for presentation, making it a markup language, rather than a programming language.

HTML elements form the building blocks of HTML pages. HTML allows images and other objects to be embedded and it can be used to create interactive forms. It provides a means to create structured documents by denoting structuralsemantics for text such as headings, paragraphs, lists, links, quotes and other items. HTML elements are delineated by tags, written using angle brackets. Tags such as <imp /> and <input /> introduce content into the page directly. Others such as ... surround and provide information about document text and may include other tags as sub-elements. Browsers do not display the HTML tags, but use them to interpret the content of the page.

HTML can embed scripts written in languages such as JavaScript which affect the behavior of HTML web pages. HTML markup can also refer the browser to Cascading Style Sheets (CSS) to define the look and layout of text and other material.

HyperText Markup Language (HTML) is the standard markup language for creating web pages and web applications. With Cascading Style Sheets (CSS) and JavaScript it forms a triad of cornerstone technologies for the World Wide Web.[1] Web browsers receive HTML documents from a webserver or from local storage and render them into multimedia web pages. HTML describes the structure of a web page semantically and originally included cues for the appearance of the document.

HTML elements are the building blocks of HTML pages. With HTML constructs, images and other objects, such as interactive forms, may be embedded into the rendered page. It provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links, quotes and other items. HTML elements are delineated by tags, written using angle brackets. Tags such as <img/> and <input/> introduce content into the page directly. Others such as -... surround and provide information about document text and may include other tags as sub-elements. Browsers do not display the HTML tags, but use them to interpret the content of the page.

HTML can embed programs written in a scripting language such as JavaScript which affect the behavior and content of web pages. Inclusion of CSS defines the look and layout of content. The World Wide Web Consortium (W3C), maintainer of both the HTML and the CSS standards, has encouraged the use of CSS over explicit presentational HTML since 1997.

HTML documents imply a structure of nested HTML elements. These are indicated in the document by HTML tags, enclosed in angle brackets thus: [61]

In the simple, general case, the extent of an element is indicated by a pair of tags: a "start tag" and "end tag" . The text content of the element, if any, is placed between these tags.

Tags may also enclose further tag markup between the start and end, including a mixture of tags and text. This indicates further (nested) elements, as children of the parent element.

The start tag may also include attributes within the tag. These indicate other information, such as identifiers for sections within the document, identifiers used to bind style information to the presentation of the document, and for some tags such as the <img> used to embed images, the reference to the image resource.

Some elements, such as the line break <br/> to not permit any embedded content, either text or further tags. These require only a single empty tag (akin to a start tag) and do not use an end tag.

Many tags, particularly the closing end tag for the very commonly used paragraph element , are optional. An HTML browser or other agent can infer the closure for the end of an element from the context and the structural rules defined by the HTML standard. These rules are complex and not widely understood by most HTML coders.

The general form of an HTML element is therefore: <tag attribute1="value1" attribute2="value2">"content"</tag>. Some HTML elements are defined as empty elements and take the form <tag attribute1="value1" attribute2="value2">. Empty elements may enclose no content, for instance, the <br/>to respect to the inline <img> tag. The name of an HTML element is the name used in the tags. Note that the end tag's name is preceded by a slash character, "/", and that in empty



#### International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

# Volume 2, Issue 3, November 2022

elements the end tag is neither required nor allowed. If attributes are not mentioned, default values are used in each case.

#### 6.2 Cascading Style Sheets (CSS)

CSS is a style sheet language used for describing the presentation of a document written in a markup language. Although most often used to set the visual style of web pages and user interfaces written in HTML and XHTML, the language can be applied to any XML document, including plain XML, SVG and XUL, and is applicable to rendering in speech, or on other media. Along with HTML and JavaScript, CSS is a cornerstone technology used by most websites to create visually engaging webpages, user interfaces for web applications, and user interfaces for many mobile applications.

CSS is designed primarily to enable the separation of document content from document presentation, including aspects such as the layout, colors, and fonts. This separation can improve content accessibility, provide more flexibility and control in the specification of presentation characteristics, enable multiple HTML pages to share formatting by specifying the relevant CSS in a separate .css file, and reduce complexity and repetition in the structural content, such as semantically insignificant tables that were widely used to format pages before consistent CSS rendering was available in all major browsers. CSS makes it possible to separate presentation instructions from the HTML content in a separate file or style section of the HTML file. For each matching HTML element, it provides a list of formatting instructions. For example, a CSS rule might specify that "all heading 1 elements should be bold", leaving pure semantic HTML markup that asserts "this text is a level 1 heading" without formatting code such as a<br/>bold> tag indicating how such text should be displayed.

This separation of formatting and content makes it possible to present the same markup page in different styles for different rendering methods, such as on-screen, in print, by voice (when read out by a speech-based browser orscreen reader) and on Braille-based, tactile devices. It can also be used to display the web page differently depending on the screen size or device on which it is being viewed. Although the author of a web page typically links to a CSS file within the markup file, readers can specify a different style sheet, such as a CSS file stored on their own computer, to override the one the author has specified. If the author or the reader did not link the document to a style sheet, the default style of the browser will be applied. Another advantage of CSS is that aesthetic changes to the graphic design of a document (or hundreds of documents) can be applied quickly and easily, by editing a few lines in one file, rather than by a laborious (and thus expensive) process of crawling over every document line by line, changing markup.

The CSS specification describes a priority scheme to determine which style rules apply if more than one rule matches against a particular element. In this so-called cascade, priorities (or weights) are calculated and assigned to rules, so that the results are predictable.

Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language.[1] Although most often used to set the visual style of web pages and user interfaces written in HTML and XHTML, the language can be applied to any XML document, including plain XML, SVG and XUL, and is applicable to rendering in speech, or on other media. Along with HTML and JavaScript, CSS is a cornerstone technology used by most websites to create visually engaging webpages, user interfaces for web applications, and user interfaces for many mobile applications.[2]

CSS is designed primarily to enable the separation of document content from document presentation, including aspects such as the layout, colors, and fonts.[3] This separation can improve content accessibility, provide more flexibility and control in the specification of presentation characteristics, enable multiple HTML pages to share formatting by specifying the relevant CSS in a separate .css file, and reduce complexity and repetition in the structural content.

Separation of formatting and content makes it possible to present the same markup page in different styles for different rendering methods, such as on-screen, in print, by voice (via speech-based browser or screen reader), and on Braille-based tactile devices. It can also display the web page differently depending on the screen size or viewing device. Readers can also specify a different style sheet, such as a CSS file stored on their own computer, to override the one the author specified.

Changes to the graphic design of a document (or hundreds of documents) can be applied quickly and easily, by editing a few lines in the CSS file they use, rather than by changing markup in the documents.



# International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

# Volume 2, Issue 3, November 2022

The CSS specification describes a priority scheme to determine which style rules apply if more than one rule matches against a particular element. In this so-called cascade, priorities (or weights) are calculated and assigned to rules, so that the results are predictable.

The CSS specifications are maintained by the World Wide Web Consortium (W3C). Internet media type (MIME type) text/css is registered for use with CSS by RFC 2318 (March 1998). The W3C operates a free CSS validation service for CSS documents.

#### 6.3 MYSQL Server

MySQL is an open-source relational database management system (RDBMS);[6] in July 2013, it was the world's second most widely used RDBMS, and the most widely used open-source client-server model RDBMS. It is named after co-founder Michael Widenius's daughter, My. The SQL acronym stands for Structured Query Language. The MySQL development project has made its source code available under the terms of the GNU General Public License, as well as under a variety of proprietary agreements. MySQL was owned and sponsored by a single for-profit firm, the Swedishcompany MySQL AB, now owned by Oracle Corporation. For proprietary use, several paid editions are available, and offer additional functionality.

MySQL (officially pronounced as /mar skju: 'el/ "My S-Q-L",[6]) is an open-source relational database management system (RDBMS).[7] Its name is a combination of "My", the name of co-founder Michael Widenius' daughter,[8] and "SQL", the abbreviation for Structured Query Language. The MySQL development project has made its source code available under the terms of the GNU General Public License, as well as under a variety of proprietary agreements. MySQL was owned and sponsored by a single for-profit firm, the Swedish company MySQL AB, now owned by Oracle Corporation.[9] For proprietary use, several paid editions are available, and offer additional functionality.

MySQL is a central component of the LAMP open-source web application software stack (and other "AMP" stacks). LAMP is an acronym for "Linux, Apache, MySQL, Perl/PHP/Python". Applications that use the MySQL database include: TYPO3, MODx, Joomla, WordPress, phpBB, MyBB, and Drupal. MySQL is also used in many high-profile, large-scale websites, including Google[10][11] (though not for searches), Facebook,[12][13][14]Twitter,[15] Flickr,[16] and YouTube.

#### **6.4 PHP**

PHP is a server-side scripting language designed for web development but also used as a general-purpose programming language. Originally created by RasmusLerdorf in 1994, the PHP reference implementation is now produced by The PHP Group. PHP originally stood for Personal Home Page, but it now stands for therecursive backronym PHP: Hypertext Preprocessor.

PHP code may be embedded into HTML code, or it can be used in combination with various web template systems, web content management system and web frameworks. PHP code is usually processed by a PHPinterpreter implemented as a module in the web server or as a Common Gateway Interface (CGI) executable. The web server combines the results of the interpreted and executed PHP code, which may be any type of data, including images, with the generated web page. PHP code may also be executed with a command-line interface(CLI) and can be used to implement standalone graphical applications.

The standard PHP interpreter, powered by the Zend Engine, is free software released under the PHP License. PHP has been widely ported and can be deployed on most web servers on almost every operating system and platform, free of charge.

The PHP language evolved without a written formal specification or standard until 2014, leaving the canonical PHP interpreter as a de facto standard. Since 2014 work has gone on to create a formal PHP specification.

PHP is a server-side scripting language designed primarily for web development but also used as a general-purpose programming language. Originally created by Rasmus Lerdorf in 1994,[4] the PHP reference implementation is now produced by The PHP Development Team.[5] PHP originally stood for Personal Home Page,[4] but it now stands for the recursive acronym PHP: Hypertext Preprocessor.[6]

PHP code may be embedded into HTML or HTML5 code, or it can be used in combination with various web template systems, web content management systems and web frameworks. PHP code is usually processed by a PHP interpreter



# International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

# Volume 2, Issue 3, November 2022

implemented as a module in the web server or as a Common Gateway Interface (CGI) executable. The web server combines the results of the interpreted and executed PHP code, which may be any type of data, including images, with the generated web page. PHP code may also be executed with a command-line interface (CLI) and can be used to implement standalone graphical applications.[7]

The standard PHP interpreter, powered by the Zend Engine, is free software released under the PHP License. PHP has been widely ported and can be deployed on most web servers on almost every operating system and platform, free of charge.[8]

The PHP language evolved without a written formal specification or standard until 2014, leaving the canonical PHP interpreter as a de facto standard. Since 2014 work has gone on to create a formal PHP specification.

#### 6.5 ANGULAR JAVA SCRIPT

AngularJS (commonly referred to as "Angular" or "Angular.js") is an open-source web application framework mainly maintained by Google and by a community of individuals and corporations to address many of the challenges encountered in developing single-page applications. It aims to simplify both the development and the testing of such applications by providing a framework for client-side model-view-controller (MVC) and model-view-viewmodel(MVVM) architectures, along with components commonly used in rich Internet applications.

The AngularJS framework works by first reading the HTML page, which has embedded into it additional custom tag attributes. Angular interprets those attributes as directives to bind input or output parts of the page to a model that is represented by standard JavaScript variables. The values of those JavaScript variables can be manually set within the code, or retrieved from static or dynamic JSON resources.

According to JavaScript analytics service Libscore, AngularJS is used on the websites of Wolfram Alpha, NBC, Walgreens, Intel, Sprint, ABC News, and approximately 8,400 other sites out of 1 million tested in July 2015.

AngularJS is the frontend part of the MEAN stack, consisting of MongoDB database, Express.js web application server framework, Angular.js itself, and Node.js runtime environment. AngularJS (commonly referred to as "Angular.js" or "AngularJS 1.X") is a JavaScript-based open-source front-end web application framework mainly maintained by Google and by a community of individuals and corporations to address many of the challenges encountered in developing single-page applications. The JavaScript components complement Apache Cordova, the framework used for developing cross-platform mobile apps. It aims to simplify both the development and the testing of such applications by providing a framework for client-side model—view—controller (MVC) and model—view—viewmodel (MVVM) architectures, along with components commonly used in rich Internet applications. In 2014, the original AngularJS team began working on Angular (Application Platform).

The AngularJS framework works by first reading the HTML page, which has embedded into it additional custom tag attributes. Angular interprets those attributes as directives to bind input or output parts of the page to a model that is represented by standard JavaScript variables. The values of those JavaScript variables can be manually set within the code, or retrieved from static or dynamic JSON resources.

According to JavaScript analytics service Libscore, AngularJS is used on the websites of Wolfram Alpha, NBC, Walgreens, Intel, Sprint, ABC News, and approximately 12,000 other sites out of 1 million tested in October 2016.[3]AngularJS is the 6th most starred project of all time on GitHub.[4]

AngularJS is the frontend part of the MEAN stack, consisting of MongoDB database, Express.js web application server framework, Angular.js itself, and Node.js server runtime environment.

AngularJS is built on the belief that declarative programming should be used to create user interfaces and connect software components, while imperative programming is better suited to defining an application's business logic.[5] The framework adapts and extends traditional HTML to present dynamic content through two-way data-binding that allows for the automatic synchronization of models and views. As a result, AngularJS de-emphasizes explicit DOM manipulation with the goal of improving testability and performance.

AngularJS's design goals include: to decouple DOM manipulation from application logic. The difficulty of this is dramatically affected by the way the code is structured. To decouple the client side of an application from the server side. This allows development work to progress in parallel, and allows for reuse of both sides. To provide structure for the journey of building an application: from designing the UI, through writing the business logic, to testing.



# International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

# Volume 2, Issue 3, November 2022

Angular implements the MVC pattern to separate presentation, data, and logic components.[6] Using dependency injection, Angular brings traditionally server-side services, such as view-dependent controllers, to client-side web applications. Consequently, much of the burden on the server can be reduced.

#### VII. SYSTEM STUDY

# 7.1 Feasibility Study

The feasibility of the project is analyzed in this phase and business proposal is put forth with a very general plan for the project and some cost estimates. During system analysis the feasibility study of the proposed system is to be carried out. This is to ensure that the proposed system is not a burden to the company. For feasibility analysis, some understanding of the major requirements for the system is essential.

Three key considerations involved in the feasibility analysis are

- Economical Feasibility
- Technical Feasibility
- Social Feasibility

#### A. Economical Feasibility

This study is carried out to check the economic impact that the system will have on the organization. The amount of fund that the company can pour into the research and development of the system is limited. The expenditures must be justified. Thus the developed system as well within the budget and this was achieved because most of the technologies used are freely available. Only the customized products had to be purchased.

#### VIII. TECHNICAL FEASIBILITY

This study is carried out to check the technical feasibility, that is, the technical requirements of the system. Any system developed must not have a high demand on the available technical resources. This will lead to high demands on the available technical resources. This will lead to high demands being placed on the client. The developed system must have a modest requirement, as only minimal or null changes are required for implementing this system.

#### Social Feasibility

The aspect of study is to check the level of acceptance of the system by the user. This includes the process of training the user to use the system efficiently. The user must not feel threatened by the system, instead must accept it as a necessity. The level of acceptance by the users solely depends on the methods that are employed to educate the user about the system and to make him familiar with it. His level of confidence must be raised so that he is also able to make some constructive criticism, which is welcomed, as he is the final user of the system.

#### 8.1 Non Functional Requirements

Non-functional requirements are the quality requirements that stipulate how well software does what it has to do. These are Quality attributes of any system; these can be seen at the execution of the system and they can also be the part of the system architecture.

#### 8.2 Accuracy

The system will be accurate and reliable based on the design architecture. If there is any problem in the accuracy then the system will provide alternative ways to solve the problem.

#### 8.3 Usability

The proposed system will be simple and easy to use by the users. The users will comfort in order to communicate with the system. The user will be provided with an easy interface of the system.

# 8.4 Accessibility

The system will be accessible through internet and there should be no any known problem.

Copyright to IJARSCT DOI: 10.48175/568 237
www.ijarsct.co.in



# International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

Volume 2, Issue 3, November 2022

#### 5. Performance:

The system performance will be at its best when performing the functionality of the system.

#### 6. Reliability:

The proposed system will be reliable in all circumstances and if there is any problem that will be affectively handle in the design.

#### 7. Security

The proposed system will be highly secured; every user will be required registration and username/password to use the system. The system will do the proper authorization and authentication of the users based on their types and their requirements. The proposed system will be designed persistently to avoid any misuse of the application.

#### IX. CONCLUSION

Gram Panchayats app are the most appropriate to address last mile governance and service delivery issues. Many people believe in fact that this is the first mile governance issue to be addressed, since the distance between the citizen and the state is the shortest in local bodies, both rural and urban. An effective GP enables people's representatives to take the lead in development planning and implementation, in the true spirit of decentralization.

Application for the Gram Panchayat Level, maintained by the Gram Panchayat in village can be easily managed across various departments and different service scheme thereby provide the govt shemes to the village people will made easier.

Effective progress by involving the Gram Panchayats to collect application of people data and maintain their own resources database. This would result incapacity building of Gram Panchayats schemes as well as empowering them inmaking the correct choices and also help in monitoring the sheeme projects.

### Future enchancement

The project has a very vast scope in future. The project can be implemented on android and web in future. Project can be updated in near future as and when requirement for the same arises, as it is very flexible in terms of expansion. With the proposed software of database Space Manager ready and fully functional the client is now able to manage and hence run the entire work in a much better, accurate and error free manner. The following are the future scope for the project.

- All works will be done in online
- No manual process

#### REFERENCES

- [1]. Allen, J. (2018). "Job III: History of Interpretation". In Longman, Tremper; Enns, Peter. Dictionary of the Old Testament: Wisdom, Poetry & Writings. InterVarsity Press. ISBN 9780830817832.
- [2]. Brueggemann, Walter (2017). Reverberations of faith: a theological handbook of Old Testament themes. Westminster John Knox. ISBN 9780664222314.
- [3]. Bullock, C. Hassell (2021). An Introduction to the Old Testament Poetic Books. Moody Publishers. ISBN 9781575674506.
- [4]. Dell, Katharine J. (2014). "Job". In Dunn, James D. G.; Rogerson, John William. Eerdmans Bible Commentary. Eerdmans. ISBN 9780802837110.

DOI: 10.48175/568

[5]. Dell, Katherine J. (2015). The Book of Job as Sceptical Literature. Walter de Gruyter. ISBN 9780899257051.