

Implementation of Newsly Aggregator using Django Framework

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Abstract: *The newsly web is a platform where we are filtering, aggregating news and providing the information or news for user friendly experience at one place. Newsly aggregator is a very simple and user-friendly application. In a news aggregator, user can select the websites user want to follow. Visiting many separate websites frequently to find out if the content on the site has been updated can take a long time. Newsly Aggregation technology helps to consolidate many websites into one page that can show only the new or updated information from many sites. Newsly Aggregators reduce the time and effort. News and providing the content for user friendly experience at one place In Newsly we have used HTML, CSS, JavaScript and bootstrap for the front End. We use crispy forms python, Django for the back-end support. This paper will explore the advancements in AI and NLP that are expected to shape the future, as well as the potential implications of human interaction.*

Keywords: HTML, CSS 5, Bootstrap, Django Framework, Crispy Form API (Machine Learning APIs), Python and JavaScript.

I. INTRODUCTION

News have become an essential part of our daily lives and news is a very important start of the day. In today's Morden world there are a lots of news website and they provide us lots of information and cover lots of topics all over the world. There are various publications and news sites online. They publish their content or news on multiple platforms. In the Morden society that we are living in, we only want things which are easily available to us. We do not want to go out purchase newspaper, read newspaper or even search on google for latest news or old news that is where out Newsly Aggregator. Now, imagine when you open 10-20 news sites every day. The time you waste to gain information. Information gain is everything in today's world. A news aggregator makes this task easier. In a newsly aggregator, user can select the websites user want to follow. Then the newsly aggregator collects the articles for user. In this online world, sources of information are increasing at a rapid speed. According to the estimates, there are around two hundred million active websites out of one and a half billion websites on the whole World Wide Web. This is the amount of information we are looking at when we search for a topic. The newsly aggregator is a web application which collect the news around the world from various source then present the information on one location. Newsly aggregator is a very simple and user-friendly web application, every age of user can easily use this application. There are well known news sites online. But, opening several news websites every single day which is very difficult. The time wasted from reading from those websites and information.

II. METHODOLOGY

The newsly aggregator is the web application which aggregate the data (news articles) from multiple websites. A newsly aggregator provides information from two different sources in a systematized way. The methodology of newsly aggregator are as follow:

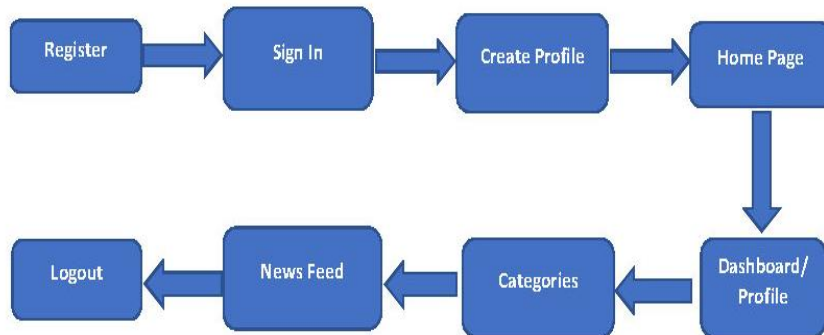


Fig 1: Methodology of Newsly Aggregator

2.1 Registration

Once the user visits our website, they will see home page from there they are instructed on how to navigate through our website. User must register with their username and password. To use newsly aggregator features, it is mandatory for the user should be registered to the newsly aggregator. A registration page where a user will input data like name, email, user even also add their profile photo and submit to a newsly aggregator.

2.2 Sign In

The login step where a user requires the authentication and identification by giving input by entering username and password. To view any news the user just has to sign-up or login into the newsly aggregator.

2.3 Create Profile

In Create profile section it allows User to create their profile. Where the newsly gathers all the information about a user. User is then directed to the home page or dashboard. The profile section also allows the user to modify his/her information or even add a profile picture. A user's profile has to provide such info as the user's name, birth date, gender, profile picture and possibly even a short description.

2.4 Main Page

The main page of newsly aggregator has to contain all the valuable information about this new service. Usually, it comprises some welcome messages, a short aggregator description, key functions, and sources. At this point, the main goal of this page is to welcome new users and actually prove that it is the aggregator a user should choose.

2.5 Dashboard and Categories

The newsly dashboard represents all different-different categories such as: Technical, Economical, Sports, Politics, Health, Lifestyle and Entertainment.

2.6 Newsfeed

In this term, the feed is just a list of the publication's users can scroll through to get freshly published news according to the users' favourite topics or types of publications. Here AI technologies come to the rescue, we used NLP to personalize the aggregator's feed.

2.7 Logout

Once the user clicks log out it indicate that the user will be to end access to a newsly aggregator.

III. LITERATURE REVIEW

[1]. Title: Designing an Engaging News Aggregator Application with Social Features and Gamification
Author: Gardahadi Gardiadi School of Electrical Engineering and Informatics, Bandung Institute of Technology, Bandung, Indonesia

Major Observation: The interaction design of digital news aggregators available in the market has never undergone any major changes in subsequent years.

The main aims of this is to create a novel design for news aggregators that optimizes for user engagement by applying gamification elements and features found in social media applications.

It will follow the Gamification Design Method formulated through the synthesis of 41 different literatures and 25 different gamification experts. 1

[2]. Title: How Modern News Aggregators Help Development Communities Shape and Share Knowledge

Author: Mairieli Wessel, Ahmad Abdellatif, Igor Wiese

Major Observation: Many developers rely on modern news aggregator sites such as reddit and HN to stay up to date with the latest technological developments and trends.

In order to understand what motivates developers to contribute, what kind of content is shared, and how knowledge is shaped by the community.

We interviewed and surveyed developers that participate on the reedit programming subreddit and we analysed a sample of posts on both reddit and HN. 2

IV. FLOW CHART

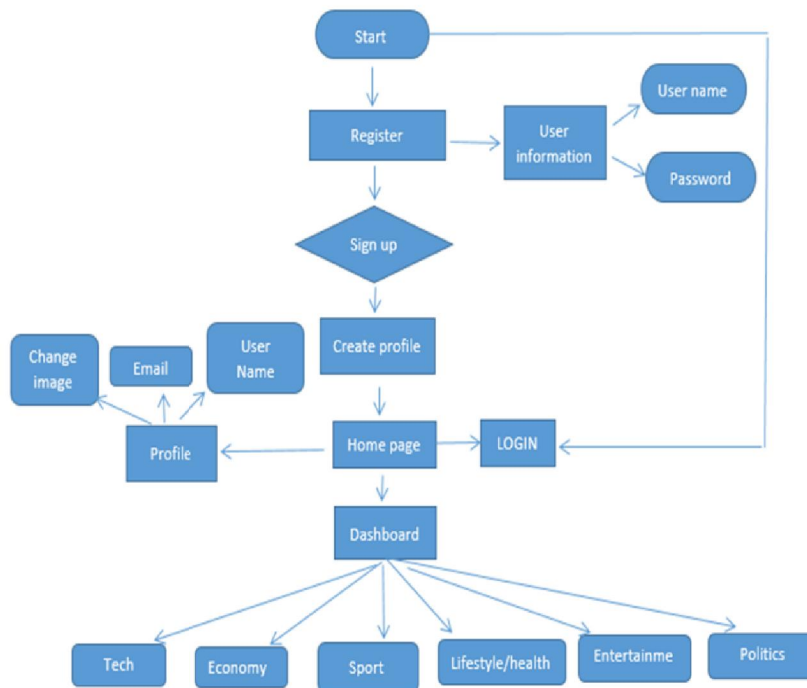


Fig 2: Flow Chart of Newsly Aggregator

V. PURPOSED SOLUTION

The proposed work of a Newsly Aggregator project typically involves several stages, such as planning, design, development, testing, and deployment. Here is a possible outline of the proposed work.

- **Planning:** In this stage, we have defined the scope and objectives of the newsly aggregator, identified the target users and their needs, and created a roadmap for the newsly aggregator.
- **Design:** In this stage, we have designed the user interface, created the dialogue flow, and defined the knowledge base and the actions that the newsly aggregator can perform.
- **Development:** In this stage, we have developed the newsly aggregator using a programming language, such as Python, and a newsly aggregator development framework using Django.

- **Testing:** In this stage, we test the newsly aggregator functionality, usability, and performance, and make any necessary changes or improvements.
- **Deployment:** In this stage, we would deploy the news aggregator to a user, such as a website or messaging app, and make it accessible to users.
- **Maintenance:** In this stage, we monitor the newsly aggregator’s performance, reviews from the users and make any necessary updates or improvements to ensure that the newsly aggregator continues to meet users’ needs and expectations. Python, and a newsly aggregator development framework using Django.

VI. SYSTEM IMPLEMENTATION

Once the user visits our website, they will see home page from there they are instructed on how to navigate through our website. User must register with their username and password. User is then directed to the home page again from where he can navigate to profile section or dashboard. The profile section allows the user to modify his/her information or even add a profile picture. Dashboard represents all different categories such as: Technical, Economical, Sports, Politics, Health, Lifestyle and Entertainment.

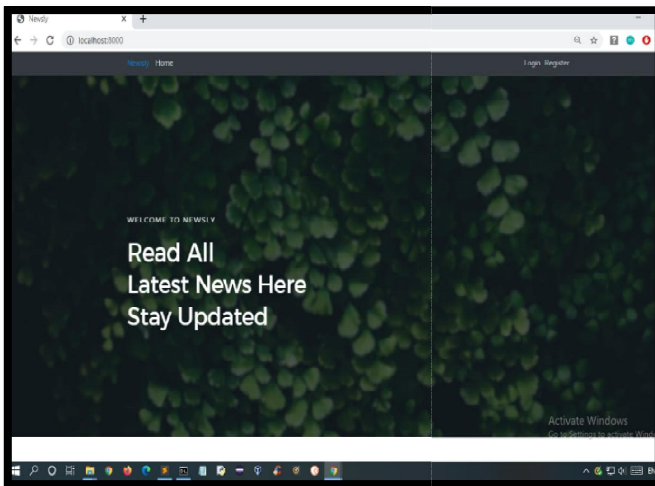


Fig VI.1. Home Page

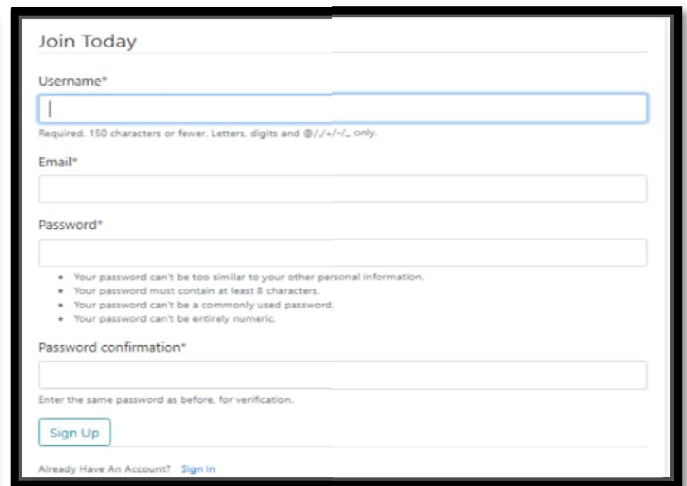


Fig VI.2. Register Page

As shown in the fig VI.1 this is the first page of newsly aggregator where that users see when they use newsly. The above fig b. shows the registration page for the users. To use newsly feature it is mandatory for the user should registered. A registration page where a user will input data into and submit to a newsly aggregator.

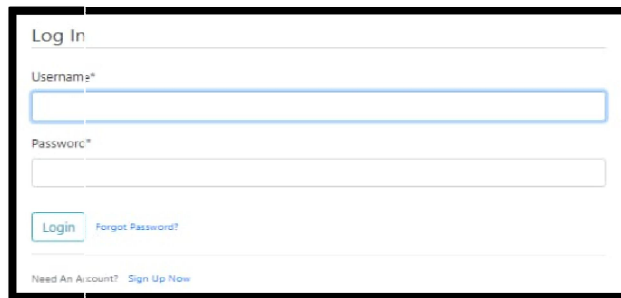


Fig VI.3. Login Page

The above fig VI.3 shows the login screen where a user requires the authentication and identification by giving input by entering username and password. The user to view any news just has to sign-up or login into the website.

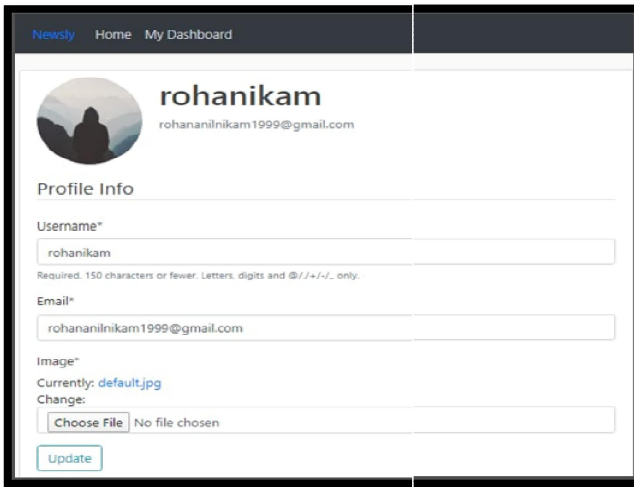


Fig VI.4. Login Page

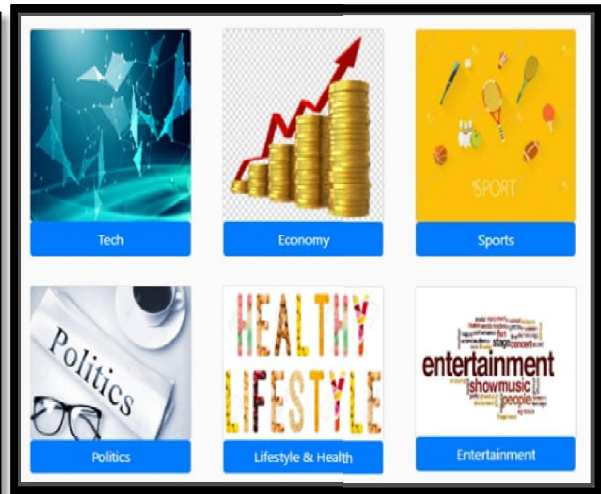


Fig VI.5. Dashboard Page

In newly aggregator where that users see dashboard of the newly aggregator. In this page it gives various option in one place. From there user can select their interested option.

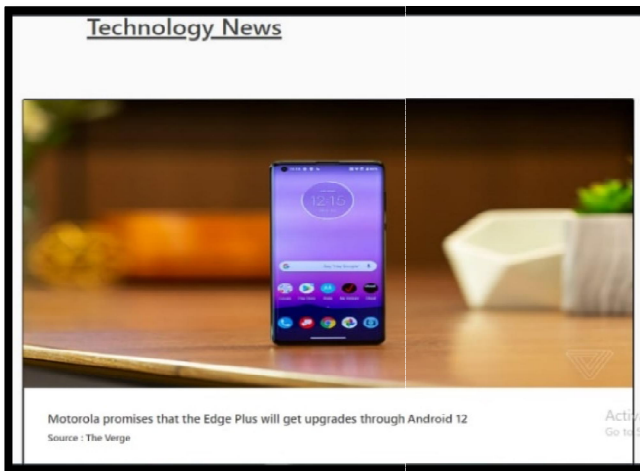


Fig VII.6. After Technology Selection Page

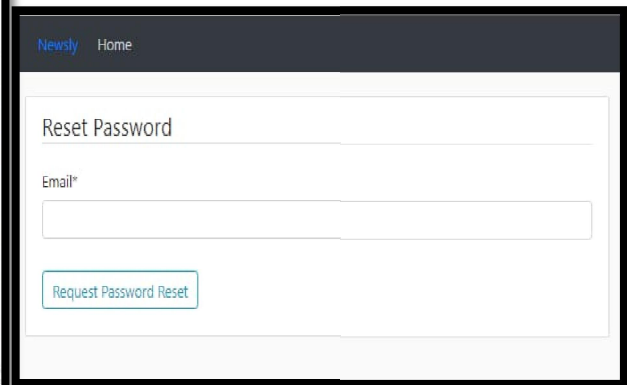


Fig VII.6. Reset Password Page

VII. CONCLUSION

During the development process we learnt about the various functionalities of Django framework in Python. We used different APIs based on machine learning and Natural Language Processing which helps in we scraping. We developed a platform where information will filter and provided according to the user requirement. We filtered the information various news websites and provided them on our dashboard.

VIII. ACKNOWLEDGMENT

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