IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429
Volume 5, Issue 7, May 2025
Impact Factor: 7.67

LabourLink-On-Demand Labour Sourcing Web App

Dr. M. D. Nirmal[1], Rushikesh Navagire[2], Gokul Lahamge[3], Nikhil Kusalkar[4],Ashish Kandekar[5]
Assistant Professor, Computer Department, Pravara Rural Engineering College, Loni, Rahata, India[1]
Student, Computer Department, Pravara Rural Engineering College, Loni, Rahata, India[2,3,4,5]

Abstract: *The Indian urbanization wave generates more demand for immediate labour services while creating pressure on metropolitan areas together with semi-urban zones. LabourLink operates as a mobile-based service that brings blue-collar workers together with service seekers through Geolocation tracking and real-time availability together with digital encryption features. The research explores the functional aspects of the LabourLink application that prioritize usability together with security and scalability elements in the architectural framework. LabourLink uses existing labour service platform features together with digital marketplace principles to integrate the real-time data synchronization engine Firebase alongside the user interface toolkit ReactJS and OTP-based authentication for ensuring user safety. LabourLink conducted its market research phase to understand that customers value open systems with verified employee profiles and secure messaging abilities. LabourLink brings user-friendly interface design which minimizes administrator work so job seekers can easily view local employment needs. The platform aims to develop additional features which will include skill categories for workers and multilingual capabilities together with a review function to build greater accountability. This paper presents the design approach involving implementation plans and future expansion perspectives for building secure digital infrastructure which enhances access to livelihood opportunities while solving actual urban problems.*

Keywords: Include Urban Labour, ReactJS, Firebase, Gig Economy, Mobile App Platform

DOI: 10.48175/IJARSCT-26824