B.Sc. Software Engineering Project Proposal





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1. Introduction

News Mavens will be the best platform for everyone to keep themself up to date about daily news reports and a vast community of journalists can take huge advantage of our platform as they can share their news in many forms and write blogs to make their profile strong and as their news goes on trending they will be paid (using CPV, CPM) for it. Our platform will provide remote work for journalists as many big companies or media houses can hire them on remote basis work (small projects, contract basis). It will also help big media houses to help them provide them with remote journalists they need according to the profile of journalists. For this platform we also have recommendation of journalists representative community National Press Club Islamabad which says it's encouraged by them and they would love to use it once it's done.

2. Problem Statement

- It is not surprising that job security is one of the most challenging aspects of being a journalist nowadays. As we know the news industry would provide no job security for the next five years. Entire publications also ceased to exist and many journalism careers ended. By the beginning of 2020, the media industry had already lost 8000 jobs and COVID was one of the main reasons.
- People nowadays rely on social media news that isn't authenticated and doesn't have a reliable source.
- Also media houses can't find the right person because of the market gap.
- Many News agency requires journalist for single project but they have to hire them as there isn't a proper channel for hiring journalist for single project remotely or on-site.

3. Aim and Objectives of Project

• Freelance Platform:

To Help the Journalists community to find freelance remote work opportunities and to reduce the Job insecurity for journalists

• Preferred suitable personality/profile for Companies:

To help the Media houses, News channels, and online newspaper companies to find the best journalist they need.

• Up-to-Date News updates:

It helps to keep everyone up to date about daily news reports that are authentic and resourceful news.

4. Literature Review

From previous papers published and projects done on mobile journalism and digitalized journalism, we concluded our idea that news mavens can fill the gap left in them. The last two decades have seen the most technological revolution. As we know everything is almost getting digitalized and has strong existence on the internet so we thought why not a platform for journalists which can help them do their job from anywhere, a platform to help media organizations, and news agencies to get news reports from a remote journalist from a place where they cannot send their person immediately. Also, our platform will help users to get every kind of news just a single tap away in form of a mobile app on their phones. Also, we have noticed the communication and wages gap in the news industry our platform will make sure to provide both ends journalists, news agencies and organization to have a better and modernized way of communication through our platform so they can end on better terms for their tasks or projects and we will make sure the rates and prices are accordingly the work effort done by journalist and also keep check no one is charging more then regular prices.

5. Existing Systems

Table 1: Proposed method vs existing methods

	Remote	Specialized Platform	Daily Vast News updates
Upwork	√	×	×
JournalismJobs.com	×	×	×
News Mavens	✓	✓	✓

6. Proposed Solution/Methodology for implementation of project

Agile Methodology:

We are using agile methodology because our project is open ended. It will require changes on daily or maybe weekly basis so for that reason we prefer agile.

• Concept:

In the first phase of Agile Methodology we will determine the scope our project. We will discuss key requirements with Journalists and news industries organizations and prepare documentation to outline them, including what features will be supported and proposed end results. At this stage we will also estimate the time and cost of our projects. This detailed analysis will help us to decide whether or not a project is feasible before commencing work.

• Inception:

We will start the design process and create a mock-up of the user interface and build the NEWS MAVENS architecture. This stage involves further input from Journalists to fully flesh out the requirements on a diagram and determine the functionality of our application. Regular check-ins will help us to ensure that all requirements are built into the design process.

• Iteration:

Next up is the iteration phase, also referred to as construction. It tends to be the longest phase as the bulk of the work is carried out here. We will work on UX design to combine all requirements of our freelance platform and all users feedback, turning the design into code. Our goal is to build the bare functionality of the project by the end of the first iteration or sprint. Additional features and tweaks can be added in later iterations. This stage is a cornerstone of Agile software development, enabling us to create working software quickly and make improvements to satisfy the user.

• Release:

The product is almost ready for release. But first, we need to ensure quality assurance to perform some tests to ensure the project is fully functional. We will test the system to ensure the code is clean if potential bugs or defects are detected then we will address them swiftly. When all of this is complete, the project's final iteration can then be released into production.

• Maintenance:

The software will now be fully deployed and made available to users. This action moves it into the maintenance phase. During this phase, we will provide ongoing support to keep the

system running smoothly and resolve any new bugs. Over time, new iterations can take place to refresh the existing application with upgrades and additional features.

6.1. Theoretical Studies

As everything is almost completely becoming digital and has a significant online presence, we reasoned that there should be a platform for journalists to work from anywhere as well as one for media outlets and news agencies to receive news reports from remote journalists in situations where they are unable to send their own personnel right away. Additionally, our technology will enable customers to get all types of news via a mobile app on their phones with only a single tap. Additionally, because of the communication and pay gaps in the news sector, our platform will work to give journalists, news organizations, and agencies a better and more contemporary means of communication.

6.2. Experimental Setup/Tools and Technologies

Frontend

HTML:

Hyper Text Markup Language is the standard markup language used to create web pages

CSS:

CSS is the language for describing the presentation of Web pages, including colors, layout, and fonts

JS:

Javascript is used by programmers across the world to create dynamic and interactive web content like applications and browsers.

Bootstrap:

Bootstrap is a front-end development framework for the creation of websites and web apps.

React & React Native:

React Native is a software framework is basically used to develop applications for Android , and IOS, Web.

Webpack:

Webpack is a tool that lets you bundle your JavaScript applications and it can be extended to support many different assets such as images, fonts and stylesheets.

Backend

ExpressJS & NodeJS:

ExpressJS is a web application framework for NodeJS

NodeJS provides various features that make web application development fast and easy.

• Server

Realm & Firebase:

A realm is a security policy domain defined for a web or application server. The protected resources on a server can be partitioned into a set of protection spaces, each its own authentication scheme and/or authorization database containing a collection of users and groups Firebase helps you develop high-quality apps, grow your user base, and earn more money. Each feature works independently, and they work even better together.

Cloudflare Server:

Cloudflare is a large network of servers that can improve the security, performance, and reliability of anything connected to the Internet.

Cloudflare CDN:

It's a content delivery network (CDN). A CDN is a distributed network of servers that provides several advantages for a web site: Cached content: By caching web site content, Cloudflare helps improve page load speeds, reduce bandwidth usage, and reduce CPU usage on the server.

Nginx:

NGINXs a software for web serving, reverse proxying, caching, load balancing and media streaming.

• Testing Tool

Appium:

Appium is a tool for automating native, mobile web, and hybrid applications on IOS mobile, Android mobile, and Windows desktop platforms.

Acunetix:

Acunetix is an automated web application security testing tool that audits your web applications by checking for vulnerabilities like SQL Injection, Cross site scripting and other exploitable vulnerabilities.

WebLoad:

WebLOAD is load testing tool, performance testing, stress test web applications. This web and mobile load testing and analysis tool is from RadView Software.

Github & Gitbash:

GitHub is a code hosting platform for version control and collaboration. It lets you and others work together on projects from anywhere.

Git Bash is an application which provides an emulation layer for a Git command line experience.

Product analytic Tool

Heap.io:

Heap.io is a product analytics tool that assists in understanding the user journey and user experience. Heap analyzes users who go to a particular site or app by tracking user interactions within the site, all without writing any code.

Google Workspace:

The Google Workspace Admin Console lets you manage your data, users and apps from a single portal. Intuitive dashboards let you add and remove users and groups, customize the user experience, manage devices, create roles, assign permissions and configure security settings

SEO Tool

Google Analytics:

Google Analytics is a web analytics service that provides statistics and basic analytical tools for search engine optimization (SEO) and marketing purposes.

Google Search Console:

Google Search Console is a free service offered by Google that helps you monitor, maintain, and troubleshoot your site's presence in Google Search results.

Ahrefs:

Ahrefs is an SEO software suite that contains tools for link building, keyword research, competitor analysis, rank, tracking and site audits.

6.3. Method of Analysis

- We will do analysis of our system by comparing it with competitors.
- We will do self attack on our system to ensure secure streaming.
- Perform beta testing by allowing few users to use it and then get feedback from them of overall system.

6.4. Result Expected

- To Provide the Journalists community with freelance remote work opportunity
- To provide the Media houses, News channel, and online newspapers companies with the specified journalists required by them.
- A permanent and secure way of earning for journalist community.
- A platform for everyone to keep themselves up to date about daily news reports according to their location and nationwide.
- To provide an authentic and resourceful news.
- To Reduce the Job insecurity for journalists.
- Secure platform to work and rely on for big media houses.

7. Utilization of Project Results

Our Platform will be used by news industries organization for example;

- o News agencies
- Media houses
- News Production Studios
- News channels
- o Main stream journalism organization
- Online News papers
- o Blog owners

Our Platform we will be used by journalist to share authentic and resourceful news and to get projects related to their expertise or get hired by news industries organizations.

Every person nationwide will have the daily up-to-date news reports in palm of their hand through our platform.

8. Project Schedule Plan

Sample of work schedule is given below.

Collection of literature

Two Weeks

Study of Literature Two Weeks
 Analysis of Proposed Scheme One Month
 Preparation of Scheme/Model One Month
 Implementation of Scheme/Model One Month
 Analysis and Simulation One Month
 Result Formulation Two Weeks
 Final Write-up & Thesis Submission Two Weeks

8.1. **Proposed Time Schedule:**

Sample is given below.

Activity	Jan		Feb	Mar	Apr	May	Jun	
Activity	10		10	10	10	10	10	
Collection of Literature	X							
Study of Literature		\times						
Analysis of Proposed Scheme			\times					
Preparation of Schemes / Model				\times				
Implementation of								
Schemes/Model								
Analysis & Simulation						X		
Result Formulation								
Final Write-up & Submission								

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10. Undertaking

We certify that the project titled "News Mavens" is our own work. The work has not, in whole or in part, been presented elsewhere for assessment. Where material has been used from other sources it has been properly acknowledged/referred.

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11. Supervisor's Comments

Take recommendation of your supervisor for your proposed research work here.

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