A Major Project Proposal on

Social Media Platform for Event, EVENTer

Submitted in Partial Fulfillment of the Requirements for

the Degree of **Bachelor of Engineering in Computer engineering**

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Abstract

The project EVENTer is the web and android platform for creating the events, sharing them among the visitors, recording the activities of the events . The web platform is build with the platform of PHP and the mobile application platform is building using the java and android. It brings Audience and the Event Organizers to one platform and connects each other. Several events are being organized day-to-day. But these events don not reach to the people i.e. we do not have a proper specific platform to get to know about these events and also event organizers do not have a specific platform to share their events. So EVETNer overcomes this situation by providing social media platform for boosting up the events to reach out the maximum users.

The major objective of this project is to build the single platform that can manage different aspects of the events which are created either by individuals or by organizations. It shows the personalized event suggestions to the user and helps to collaborate with volunteers, organizers, supporters. The mobile application is limited to android platform only, not available for other OS. The unauthentic information can flow in the system which can't always be corrected.

The development is carried out with the agile principles following the scrum framework of agile methodology. The project will complete in major 4 sprints and will extend up to one and half month.

Keywords: EVENTer, Google Map API, REST API, Sprints

Contents

1. Introduction

EVENTer is the web and android platform for creating the events, sharing them among the visitors, recording the activities of the events and arranging the visitors, volunteers and partners. Visitors can search the event, know the details of the events, reserve the seat to attend the event, showing interest in the event by interested button clicking and also following the companies and persons.

There will be two types of accounts, personal and organizational. The organizational account is verified by the admin panel. Both the organizational and personal account can create the event. These events are visible in the event feed of the visitors. Events are divided according to their different parameters. Visitors can filter the event by different given parameters.

The created events can be edited or deleted by the event creator, accept for the sponsorship, volunteers and participants. The participants can set the remainder time for the event, know about the event in detail.

Personalized suggestions are made on the basis of the past data for the events in the recommended section using the training algorithm.

1.1.   Problem Statement

We came up with this project idea to somehow eliminate the daily problem we are facing in this event. Here are the problems that arise and can be reduced to a certain extent.

Many events can happen without getting unnoticed by various interested people. There is still lack of proper event advertising- finding platform. The advertisement in other platform are not cost efficient, and are not target specific too. This makes hard for both the organizer and participants to get connected for the event.

The event created on Facebook is polluted with more non important posts that are creating the hectic to cope with.

1.2.   Project objectives

The major objectives of this project are

- **Single platform to get and set all the information about the event.**

EVENTer is a single and event only, specific online platform for advertisement of the event. In this event you can create and search of the events happening in the country, covers all sectors and categories.

- **Personalized recommendation of the event from past data**

The system will display the selected events from the category you are interested. Our system will be designed to perform the personalized recommendations on the basis of your field of interest, past participated events and events you are interested in.

- **Collaboration destination for event organization, sponsors and volunteers.**

Our major objectives will be able to manage all the groups related to the event. They can be sponsors, other partner organizations and volunteers. These groups play the pivotal role in the success of the event. So we are building a platform that can handle all of them in one place.

1.3. Project scope and limitations

The scope of the EVENTer is extended to all the internet users all over Nepal who are interested in participating in events and to all those companies who are the event organizers.

The project will be available in Android and web platform only. To view the events and attend the events you must have an account on the platform.

The events are not controlled by the admin panel, so the false information cannot be filtered by us. So non authentic information can flow or include in the platform.

1.4. Significance of the study

The project is determined to be beneficial for all the event organizers and related partners. It was found to be useful to take into the implementation. It is believed to provide the business value by the project. It also implements the different part of the engineering ranging from databases to API and Data mining. It combines the social media networking with AI.

2. **Literature Review**

This section consists the literature study on different topics like google map API, event base others platform. It aims to provide readers a theoretical base for the project and also develop an understanding of the nature of the project.

2.1. **Android**

Android, initially developed by Android Inc. and later acquired by Google in 2007, is an open source mobile operation system developed primarily for touchscreen mobile devices and tablets. Built upon a modified version of the Linux kernel, Android is currently one of the most used mobile operating systems in the world. In addition to the mobile devices, various other devices like televisions, cars, wrist watches, game consoles and digital cameras use Android today. The UI of android is written in Java, while its core and kernels are written in C and C++.

The functionality of the devices running Android can be extended by installation of several custom applications, commonly called as "Apps", which are primarily written using Java. The applications run on top of Android Runtime and make use of core libraries set up by the application framework. On the foundation lies the Linux kernel, which acts as a bridge between the underlying hardware and the android library.

2.2. **Existing systems like EVENTer**

Social media platform like Facebook has the inbuilt functionality for event creating and sharing. We can create the event share among friends. We can search the events and get enrolled in it.

But the event on Facebook is just the other functionality among many functions. It provides a wide range of categories. Our project will be only the event specific and can have better functions that the Facebook event can't provide. Such as, the list of partners, sponsors and volunteers can't be found in the Facebook event which we are going to implement in this project. The history of the participated events is recorded in our project.

The facilities like featured events and advertised events are supported by our project. Our project is highly inspired from the event system of Facebook. Much functionality is similar to the Facebook events.

2.3. **Google Maps API**

Google Maps API was launched by Google in June 2005. By using Google Maps API, it is possible to embed Google Maps site into an external website, on to which site specific data can be overlaid. Google API allow for developer to

integrate Google Maps into their websites. The Google Maps API is free for commercial use, provided that the site on which it is being used is publicly accessible and does not charge for access, and is n ot generating more than 25000 map accesses a day.

3. **Methodology**

The EVENTer system generally revolves around 3 groups of users- Event organizer, Participants and the group of supporters, sponsors and volunteers. The general interaction between them is through this system in the following way.
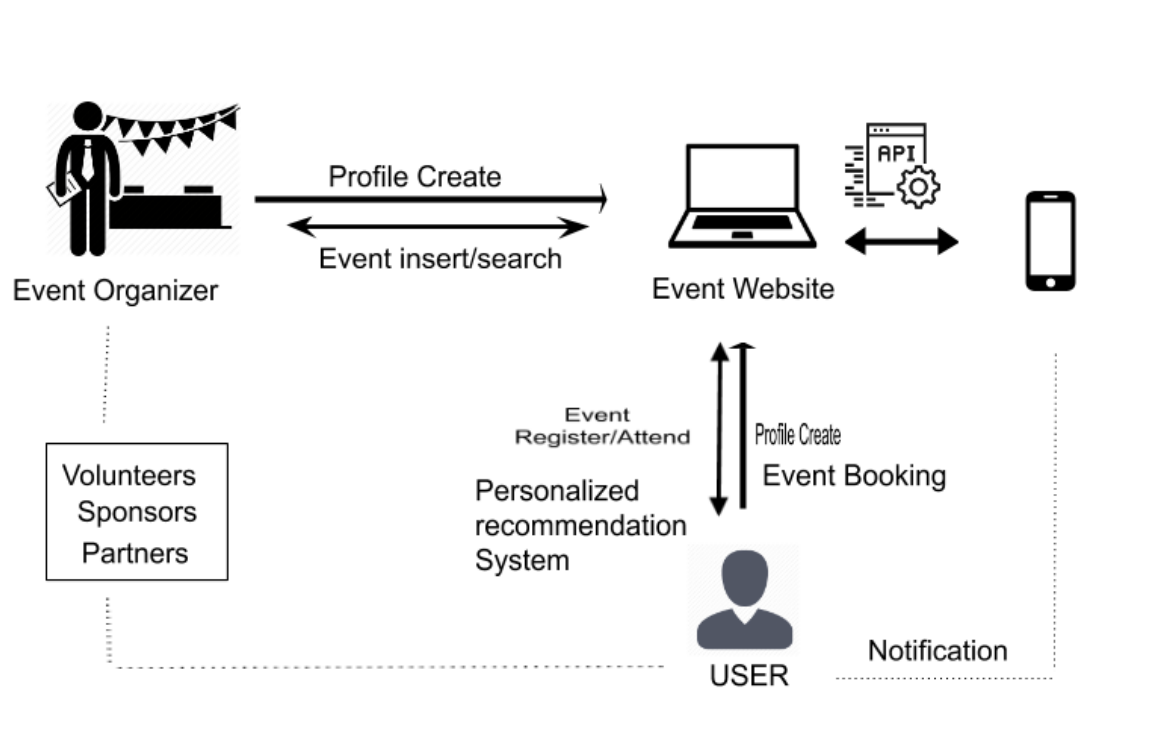
Figure 1 System architecture

All the events organizing companies can create an account in the event system and register or insert the details of the events according to the category. The other user can check the events and add their own events too.

The users/ companies who want to volunteer or became the partners and sponsors can register through this site. The registered events can be altered i.e. can be modified according to the needs of the events.

3.1. Software Development Life Cycle

For our project, we plan to implement agile methodology of software development. Agile methodology is highly effective method of software development. This method focuses more on individuals and interactions instead of processes and tools. Working software is more important than comprehensive documentation. Process should respond change rather than following plan.

Agile methodology helps to deliver customer satisfaction by delivering valuable software continuously. It always accepts change of requirements how early or late in the project. It helps to deliver software within a shorter timescale. Sprint system in agile is proved to be highly effective as it regularize the development speed and helps to accomplish projects in time.

3.1.1. Scrum method

Our project will be carried out in the scrum method framework. We would be following this methodology throughout the project. We would be performing our tasks in the 3 formal scrum events.

- The first sprint will be for the double linear development of the frontend. In this period we will be divided into two groups- Mobile (Guman and Naresh), Web development (Suman and Kendra) and build the early prototype of the project.

  The sprint duration is considered of 2 week.

- The second sprint is for the backend development, admin panel development and API development. This sprint will extend up to two weeks.

- The third sprint is defined for web services, API integration between different systems. The sprint period will be of two weeks.

The deliverables are examined through the sprint review and retrospective system.

  • Sprint Review- It is carried out once the Sprint has been done. It is meant to inspect the increment and adapt the product backlog if it is necessary

  • Sprint Retrospective- This is a chance for scrum team to carry out an inspection of what has been done and develop a plan for improvements with the next sprint. It is done before the sprint planning begins and after sprint retrospective.

3.2. ER Diagram
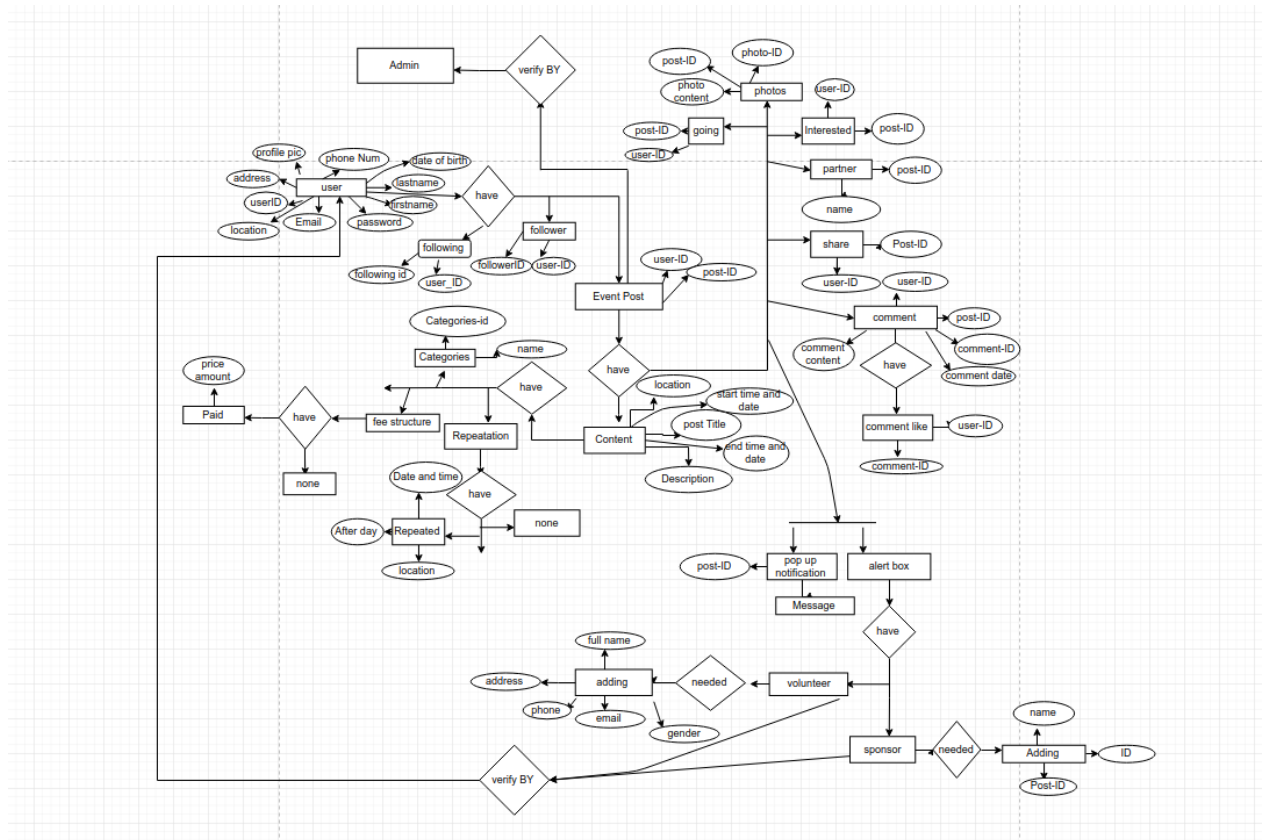
Figure 2 ER Diagram

3.3. Technologies used

S.no	Technologies	Used For
1.	Angular 7/8	Structuring dynamic web application
2.	PHP	Web framework for our website
3.	MySQL	Database for application development
4.	PHP	Building WEB API
5.	Bootstrap	Web design frame-working
6.	HTML, CSS & JS	Web designing technologies
7.	Java Android	Android application development

1.	VS code	Frontend development
2.	Postman	Integration testing of API
3.	Android Studio	Android development platform
4.	Adobe Photoshop	Graphical works
5.	Slack	Team communication
6.	GitHub	Android version control

3.4. Approaches To Be Used For Three Tier Synchronization (WEB, ANDROID AND DATABASE VIA API)

4. **Proposed Performance Analysis**

The system/ Software are tested using the agile methodology called agile testing. It aligns with the iterative software development. In this method, the testing is integrated alongside development called test driven development (TDD).

Impact Assessment
Gather inputs from stake holders and users, this will act as feedback for next deployment cycle.

Approval Meetings for Deployment
At this stage we review the features that have been developed/ implemented are ready to go live or not.

Start- Test Plan Meet Up
All stakeholders come together to plan the schedule of testing process, meeting frequency and deliverables.

Daily Standup Meetings
This includes the everyday standup morning meeting to catch up on the status of testing and set the goals for whole day.

Agility Review Meeting
Weekly review meetings with stakeholders meet to review and assess the progress against milestones.

AGILE TESTING

Impact Assessment

Agility Test Planning

Release Readiness

Daily Scrums

Agility Review Meeting

Figure 2 Agile Testing

5. **Proposed Deliverables**

- **Website of EVENTer**

The website will be our major part of development. The website will be integrated with android application using API. The website would be user friendly, clean functioning and in accordance with the latest technology.

- **Android Application called EVENTer**

The API integration android application will be the major attraction in our project. All the features are also integrated in the android application.

- **Admin Dashboard**

The admin control panel will be our next proposed deliverables. It will function as the control panel which can alter the accounts.

6. **Requirement Analysis**

Requirement analysis, in software engineering encompasses those tasks that go into determining the need and conditions to meet for a new or altered product, taking account of possibly conflicting requirements of the various stakeholders, such as beneficiaries and users. It is the early stage activity of requirement engineering which consist all the activities with eliciting, analyzing, documenting, validating, and managing requirements.

6.1. **Functional Requirements**

S.N.	Requirements	Priority
1	User interface for the users to view events and users	High
2	User is able to create events (as individuals or organizational)	
3	User is able to sign in to view event details	
4	User is able to sign out from the application	
5	User must be logged in to create an events	
6	User can manage their own profile	
7	User cant connected without internet	
8	User can interact with any event by activities such as comment, like, interested, going etc.	

6.2. **Non Functional Requirements**

S.N	Requirements	Priority
1	The system needs android phone for use mobile app and browser for website	

2	The application should be user friendly	
3	The system is implemented using tools specified (Android Studio 3.5.2, Advanced REST Client, E-Draw, Google Chrome, Xampp, Sublime Text Editor, Adobe Photoshop)	
4	Applications need to operate successfully (or degrade gracefully) within a wide spectrum of operating conditions, such as a range of supported screen resolutions and form factors, network bandwidth situations and network types (2G/3G/4G/Wi-Fi), etc.	
5	Application should emphasize on High Performance, High Responsiveness, Good Scalability, Good Usability, High Reliability, Good Security, Modifiability and Maintainability.	

6.3. Input Requirements

Source of Data:

- The information will be given by user themselves and the events have to full filled detailed requirements.

Data Required:

- User Information

This contains user's full name, username, email, password and address.

- Events

This contains the events details (Title, Date, Time, Venue, Organizer, Category, Price) input by the user.

6.4. Output Requirements

Output Objectives:

The user requires following output from our system

1. Broader details of all the events in the newsfeed and map

2. Full detail on the events they have joined to

3. Event recommendation based on user's past and consumption data and pattern

6.5. Security Requirements

Users are to sign up and then only get access to the information regarding the events so that each user can have their separate record to the events they are interested in or joined to and only authorized user will be able to update the events. Therefore each user have been given their own account with username and password to login. Password are saved in database, which are hashed using Sha-1 protocol. This will kept the information safe from intruders as well as those who are authorized to manage database only
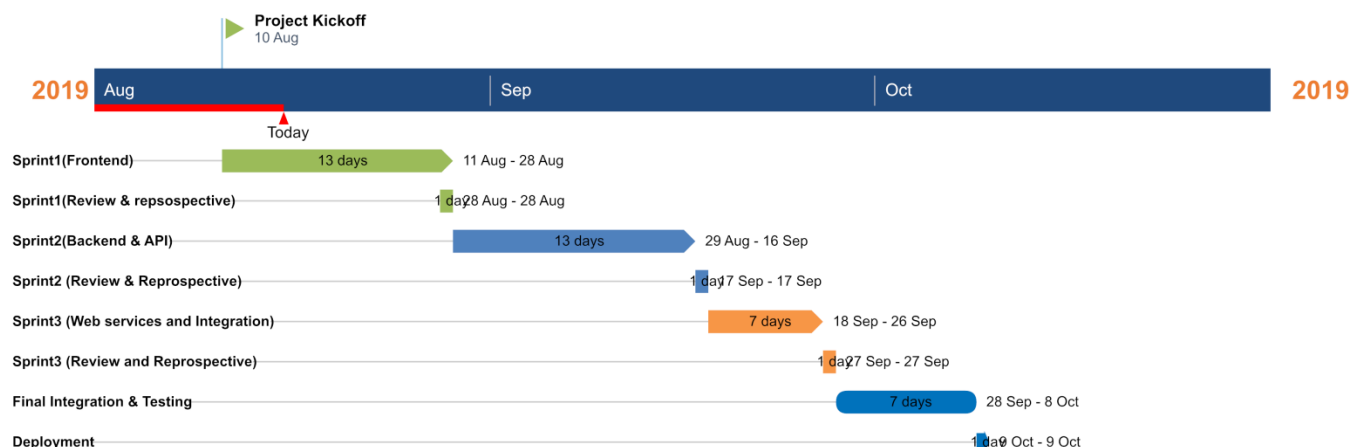
7. Project task and time schedule

Figure 3 Gantt chart

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