

ENGINEERING PROJECTS IN COMMUNITY SERVICE

SAHAYA DOCUMENTATION

Team Name:

HOLY KNIGHTS OF HITAM

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Project Specifications

Project Summary

Sahaya is a Non-Profit organization which works for the welfare of under privileged children. It empowers children through providing basic education and life skills to sustain in the society. Our team is providing a solution for their problems through a mobile application. This application has separate interfaces for volunteers and core team members. The application have several features like timetable, teaching materials, discussion forum and organization details

Description of Community Partner

Sahaya provides an opportunity to individuals who want to make a positive impact in the society by empowering, enriching and encouraging under-privileged school going children.

Sahaya Undertakes below activities

- General Awareness
- Science and fair
- Sahaya Art world
- Sahaya Sports
- Personality Development

Stakeholders

Priority	Stakeholders	Relation
1	Students at School	Client of Client
2	Sahaya Volunteers	Client Employees
3	Sahaya Organization	Client
4	Parents of the Students	Stakeholders in Community
5	HITAM College Students	Project Members

Social Context

Our project will have a profound impact on the volunteers and people. The app would bring awareness of Sahaya's mission in service to the people. The app would make people to take an initiative to teach or help children in their free time. Through Sahaya and our app children will be benefitted and which would further impact their parents. Once a child is provided with the right education he would work the development of himself and the society. These children will further take initiative and work for the progress of Sahaya's mission.

User Needs

The user requires the following necessities:

- **Volunteer/CoreTeam – Login-Registration**
 - Core team login
 - Volunteers should be receiving the push notifications, after a session, a volunteer shares their feedback and the one who logs in with core group can view the feedback.
 - Volunteers can mark to attend any of the sessions.
- **Content/Material section**
 - Few sections on the things taught at Sahaya, like English, Computers, Mathematics, GK etc.
 - Each section will have levels from 1 to 10. In each level, there should be content to be taught.
- **MAP integration**
 - Show active sessions of the week.
 - Show required/Committed Volunteers.
- **NOTE:** The App should be completely open source. The plugins/ dependencies must be open source/ free and the source code of the app should be open source.

Project Objectives

To provide an interface through an Mobile application which is consistent, useful and user friendly for assisting sahaya in their mission

Outcomes or deliverables

The outcome of our project is an Mobile application for assisting Sahaya in their mission.

Primary objective of this app is to provide

- Flexibility in monitoring volunteers
- Creating social awareness of our community partner in the society
- Providing assistance for teaching through teaching materials and references to volunteers

This application has separate interfaces for volunteers and core team members.

A volunteer can have access to

- Timetable and event schedule
- Teaching materials
- Discussion Forum

- Their profile
- Organization details

A core team member has access to

- All features that a volunteer can access
- Attendance and Center management
- Event management
- Volunteer management

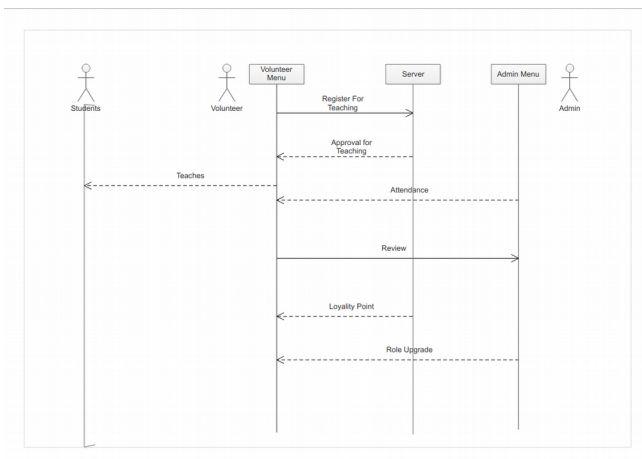
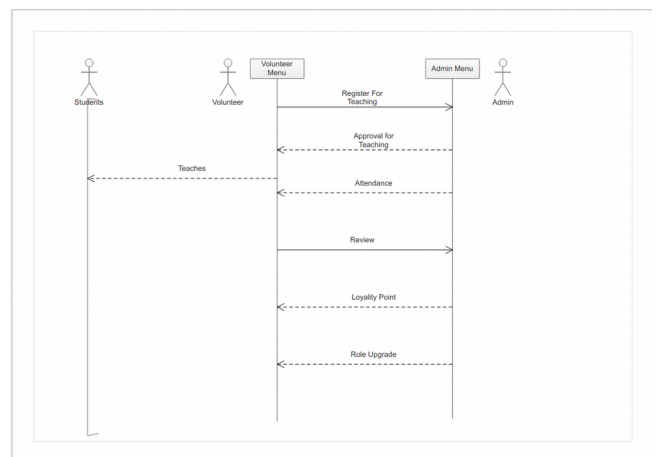
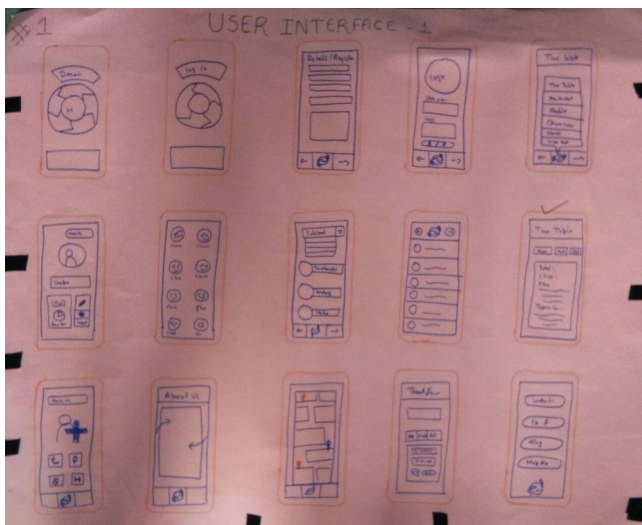
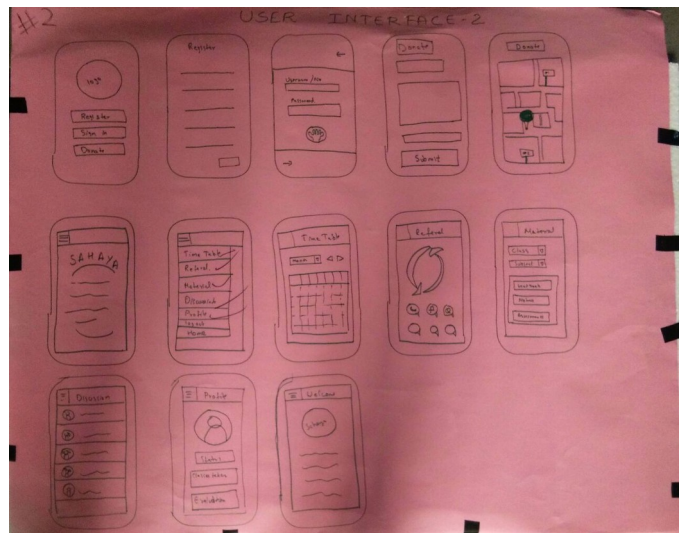
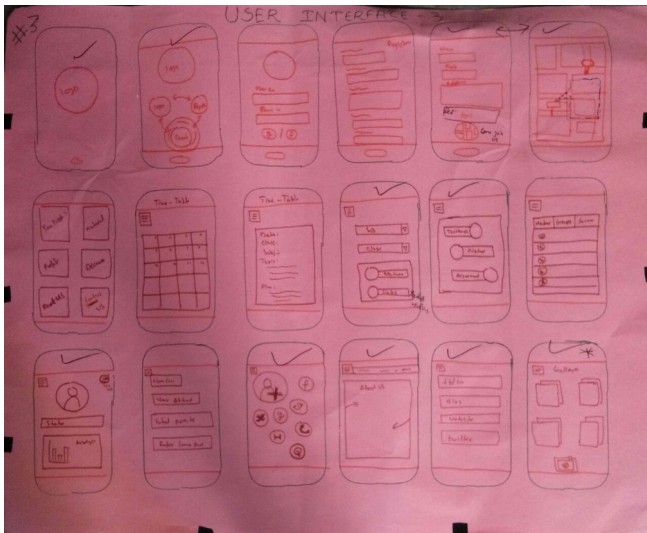
Specifications

Specifications	Detail
Type	Mobile Application
Operating System	Android
Minimum Android Version	Android 5.0 Lollipop
Services Required	Internet Connectivity Google Maps
API Used	Firebase Database Google Maps

Conceptual Design

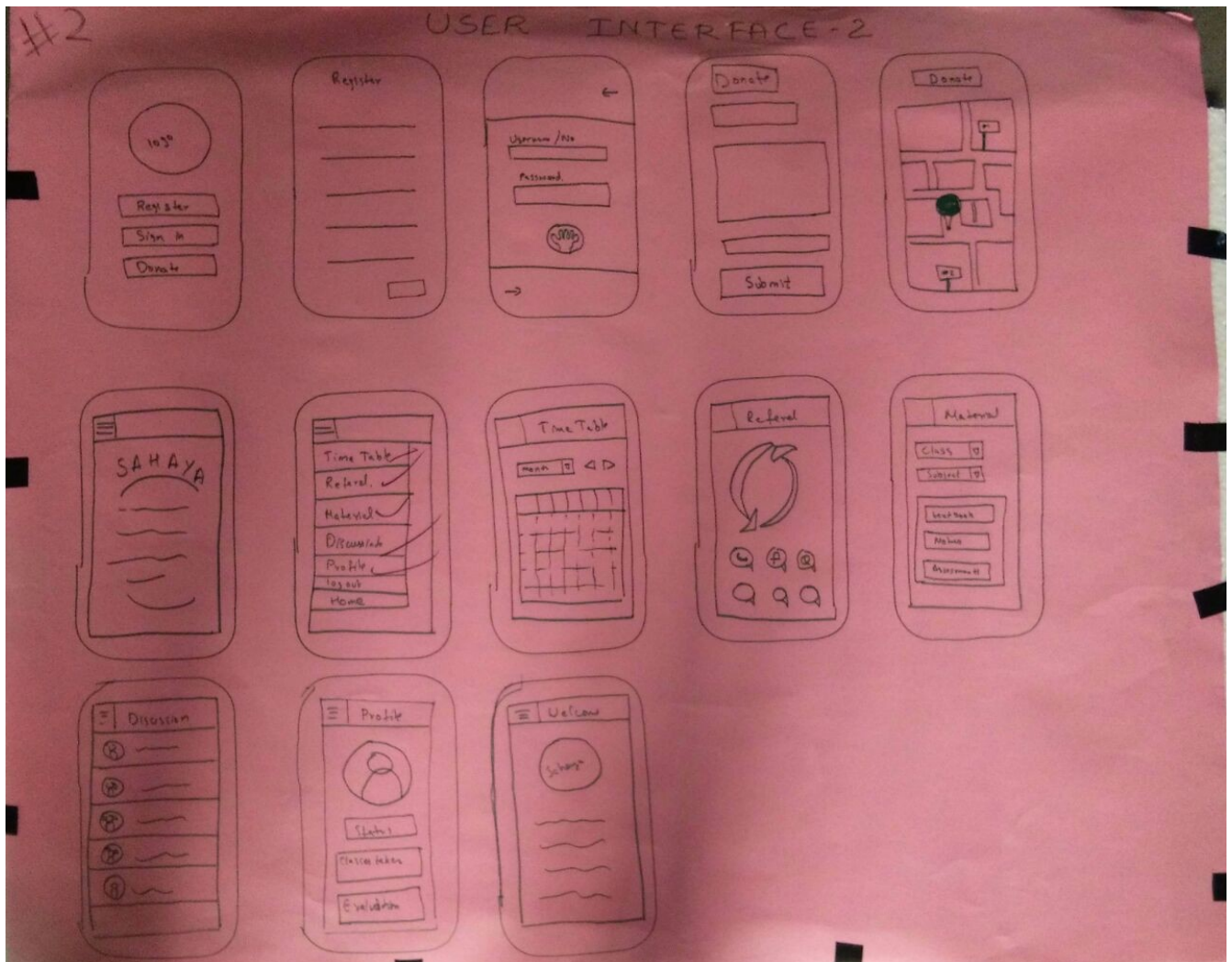
Brainstorming

Our team has gone through a long thinking process and has done product surveys to check whether what we are doing is unique or not. We came up with few unique solutions. The following are the proposed solutions :



Concept Convergence

The solutions proposed went through a detailed discussion and all the pros and cons were discussed. From the solutions all the team members converged at a single point and the solution was made.



Proposed Solution

After a lot of brainstorming and detailed discussion with the Stakeholders, we came to a conclusion that the following solution is apt to solve the problems. In the following method:

Volunteers

1. Volunteers register to teach a subject
 1. If the subject is not opted by specified number of volunteers it will be allotted to the volunteer who is requesting for that
 2. if the subject already has reached the specified number of volunteers that subject will be automatically removed from the list
2. After allotment of subject volunteer receives a confirmation message with link to the teaching materials
3. Volunteer can view event map, event plan through the timetable.
4. Volunteer has access to discussion forum where the pros and cons of session will be discussed
5. Volunteers get points according to his participation in making the events successful

Admin Member

1. Admin member has access to all the facilities of the application
2. Admin has some special privileges
 1. Event management
 2. Center management
 3. Volunteer monitoring

