NavCampus

Project Plan

Team Members:

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1. Introduction

- **Overview**
  The “NavCampus” is a webapp that supports blind people in navigating on campus, especially in buildings. The main goal of this project is to create an easy to access navigation program for visually impaired students, helping them find their classrooms and avoid obstacles.
  In order to achieve this, we apply concepts of requirement engineering to create a model of the necessary systems to support the user. Based on that model we will create a prototype for the “Theater Arts” Building on the Cal Poly Humboldt campus, using an object-oriented programming approach. The result of the project will be available as a web app on smartphones.

- **Deliverables**
  Listed below are the deliverables for this project:
  1. preliminary document (13.09.2023)
  2. WRS document
  3. mock up
  4.

- **Evolution of this Document**
  This document acts as the preliminary document of the project. It outlines the scope and plans at the beginning of the project. It will evolve when progresses in the project are made. Refer to this section to backtrack the stages.

Revision Number:	Date:	Revised by:	Summary:
1.1	9/13/2023	Chan	Preliminary Document
1.2	22.10.2023		Update on weekly advancements
1.3			

- **References** (I guess used API`s and such)
  - Xxx

- **Definitions, acronyms and abbreviations**
  - API: API is the abbreviation for application programming interface. It helps in retrieving requests and information.
  - UML diagram: Unified Modeling Language Diagram
  - App: Short for application.
  - HTML: HTML is a markup language used for structuring and presenting content on the World Wide Web.
  - JS: JavaScript, often abbreviated as JS, is a programming language that is one of the core technologies of the World Wide Web, alongside HTML and CSS.
  - CSS: CSS is used to style web pages and make them more attractive and user-friendly.

2. Project Organization

2.1 **Process Model**

Since we are a small Team of just three people we decided on the “Agile” model for the “NavCampus” app. In this model we can decide on small changes quickly and can update the app accordingly. Also new features can be modeled and implemented separately if new ideas come up during the project. The Agile model goes through all four development phases for each feature to always have a functional application.

2.2 **Organizational structure**

We have three team members, so we will share all responsibilities for the system design and the development equally. The team will be self-directed and organize all matters regarding “NavCampus” by themselves. Because we are such a small team no hierarchy is needed to fulfill the deliverables. All Team members differ in strengths and experience so we may work on different parts of the project when it would be logical.

2.3 **Organizational Boundaries and Interfaces**

All communication regarding the project will be done on Discord or in person. Each team member has access to it and can communicate everything necessary through these methods. The coordination of tasks for each phase will be done by the assigned lead. Also, the lead needs to communicate the objective of the phase with the team members as well as coordinate its completion.

Week	Team Lead	Deliverable/Goal
1	Nico Kopitza	preliminary document
2	Nico Kopitza	AS-IS/TO_BE
3	Nico Kopitza	Issues within the domain
4	Nico Kopitza	Functional requirements
5	Nico Kopitza	Non functional requirements
6	Nico Kopitza	Revision of requirements
7	Nico Kopitza	Mock up
8	Nico Kopitza	Presentation slides
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11		
12		
13		
14		

2.4 **Project Responsibility**

The Team shares equal responsibility for the whole project. We have established that each member contributes to the project according to the capabilities of the individual. Help should be given in all appropriate circumstances. The Team lead may differ in each phase or week in the project.

3. Managerial Process

3.1 **Management objectives and priorities**

The main goal of the lead is to coordinate the work in such a way to meet the deliverable of the week that was discussed in section 2.4. For this the lead oversees the meeting coordination as well defining the deliverable. Most important is to meet deadlines that are outlined in the syllabus.

3.2 **Assumptions, dependencies and constraints**

The assumptions for the “NavCampus” are:

- The App will be used by mainly blind people.
- The users can use a smartphone to a certain degree.
- The users will listen to the manual instructions of the app

The dependencies for this project are:

- The user needs a working smartphone.
- The camera of the smartphone needs to work.
- The user can’t be deaf.

The constraints for this project are:

- The due date of every phase.
- The amount of resources that the team can use. Mainly time and money.
- (The smaller number of members in comparison to the other teams.)

3.3 **Risk Management**

The risks regarding the project are:

- Problems regarding the implementation
- Problems in the coordination of meetings because of conflicting schedules of the team members
- Sickness
- Issues in the modeling phase

3.4 **Monitoring and controlling mechanisms**

- Weekly meetings
- Shared version control on Github/replit
- Shared current documents on Discord

4. Technical process

- **Methods, tools and techniques**

Lucidchart will be used for the necessary modeling and planning of the requirements for the app. The programming language used will be C++.

The version control will be done on (Github/replit) to make collaboration of the team members possible.

Discord is the main method of communication. All online team meetings will be done here. It also provides a way to keep track of all written communication and references.

- **Software Documentation**

The software documentation will include the following:

- Domain model
- Sequence model
- Use case

- Tobe/asis
- User manual
- Comments in source code
- More may be added throughout project

- **Project support functions (what exactly are those?)**

May be added throughout project

5. Work elements, schedule and budget

- The team lead may rotate in each phase
- The team leader will find the best timeframe for the meetings
- The schedule will follow section 1.2 and 2.4 but changes may occur throughout the project