**VisionPro**

**Preliminary Project Plan**

**Phase 1**

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**1. Introduction**

**1.1 Project overview**

The goal of this project is to develop an app that allows blind students or a blind visitor to go from one location to another location either in the same building or a different building. The app will mainly focus on the safety of the user as it is important to be able to detect obstacles and avoid any collision. It will also need to be able to cover a wide range of different places, for example, cafeteria, lounges room, offices, labs, etc. Lastly the app must be able to approximate the time to reach the destination using the Dijkstra algorithm.

Phase one is the preliminary project plan (which is what we are currently working on as of speaking). Our focal point for Phase two would be focusing on the WRS-document, creating Questionnaire and a PPT for the presentation, and how we can take the Project Plan to the next step.

**1.2 Project deliverables**

The following are the deliverables for this project:

* Preliminary Project Plan ----------------------- Deliverable 1
* Final Project 1 ----------------------- Deliverable 2
* Final Project 2 ----------------------- Deliverable 3

Deliverable descriptions:

* Preliminary Project Plan – Preliminary Project Plan (Brief Project Description with your own team's smartphone app name, Team Name, Team organization, Schedule, Team web site URL, Team leaders/deliverable, Tools, etc.
* Final Project 1 – Project I presentation & submission - WRS-document, Questionnaire, PPT, evolving Project Plan
* Final Project 2 – Final Project II submission, presentation and demo - Project I (if any change has been made), Project II (Product: Vision document + WRS document; Process Spec --- use notations for both the product and process specs; Final Questionnaire), Any dependency/traceability between Project I and Project II

**1.3 Evolution of this document**

This is a preliminary document with the scope of the project. This is a living document that will see considerable changes made to it as the project progresses. Current aspects of this document are likely to change due to this.

**1.4 References (Referenced documents, documentation, etc.)**

Prof. Chung Website:

* <https://personal.utdallas.edu/~chung/SE4351/syllabus.htm>
* <https://personal.utdallas.edu/~chung/SE4351/Project1.pdf>
* <https://personal.utdallas.edu/~chung/SE4351/Project2.pdf>
* <https://personal.utdallas.edu/~chung/SP/SoftwareProjectManagementPlanTemplate.htm>
* <https://personal.utdallas.edu/~chung/SE4351/WRS-template.pdf>

Other Website:

**1.5 Definitions, acronyms, and abbreviations**

**2. Project organization**

**2.1 Process model**

The design process for this project will be primarily done using UML diagrams. Properly utilizing these UML diagrams will allow our team to form a good basis for the project’s desired system through having a better visual representation of how the various components should and will interact with one another. As for our development process we will primarily be using the waterfall lifecycle, with adjustments to this lifecycle process as needed.

**2.2 Organizational structure**

The members involved in developing this project are:

* Joshua Brown
* Tommy Wright
* Aditya Sajeev

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The Team member starting the team leader position rotation will be:

**2.3 Organizational boundaries and interfaces**

Deliverable 1 is a project plan which outlines important parts of the project, the deliverables, the due dates, etc. For further deliverables the expectation is to have an updated project plan, a project powerpoint, a project questionnaire, as well as a WRS for deliverable 2. For deliverable 3 all design and system documentation will be finalized as well as have the system completed to the point where it is able to function fully.

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**2.4 Project responsibilities**

All team members are responsible for participation in all phases of the project’s life cycle. i.e., planning, program development, etc. to ensure that all members are on the same page. Level of participation varies depending on their roles in the system’s development.

**3. Managerial process**

**3.1 Management objectives and priorities**

The primary task for the managerial position is to schedule meeting timing, lead said meetings, and keep meetings on track. As well as staying on top of project due dates.

**3.2 Assumptions, dependencies, and constraints**

This relates primarily to time constraints for deliverables related to the project. Section 5 lists the due dates for each deliverable.

**3.3 Risk management**

Risk management is handled by the team lead for each expected deliverable. The team will communicate with one another some time before the expected due to ensure that all requirements are completed on time and correctly.

**3.4 Monitoring and controlling mechanisms**

The team’s monitoring and control mechanisms are primarily achieved through communication through discord, both through voice chat and text chat. Also, the version control provided by the team’s GitHub repository further facilitates this as it shows what team members have added or made changes to documents, what time they did so, and so on.

**4. Technical process**

**4.1 Methods, tools, and techniques:**

Primarily because that is the language that all members of the team are familiar with and would be able to complete the project using most effectively. All team communications will be done through Discord in a server created by one of the team members. All project deliverables will be posted on our team’s website.

**4.2 Software documentation**

Additional documentation is created as needed and can be found on the team website/GitHub repository. Current documentation includes:

Documentation includes:

* VisionPro Preliminary Project Plan – This document.

**4.3 Project support functions**

All documentation, design diagrams, and other related documents can be found at our team’s website:

**5. Work elements, schedule, and budget**

This project is scheduled to be completed by April 30th, 2024, for the final demo. Below is the outline of the timeline of the deliverables:

Deliverable 1 due by 02/15/2024

Deliverable 2 due by 03/28/2024

Deliverable 3 due by 04/30/2024