COSC 4P02 Project Proposal

January 17th, 2023

Prof. Naser Ezzati-Jivan

Members

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Role: Scrum Master

Introduction

Museums are an essential part of allowing the people of the present a chance to revisit history and learn via a collection of culturally, historically, scientifically or even just artistically significant artifacts, providing a glimpse into history. However, with most museums having large amounts of these artifacts, it is difficult for visitors to intake all the information available or even navigate their way through the museum to visit all their desired pieces/exhibits of the institute.

For our team, we plan to develop a fully interactive mapping system to allow all visitors, despite their level of technological competence, to navigate through the museum with sufficient aid and provide information about the exhibit itself, points of interest in the museum and visitor facilities such as washrooms, giftshops and points of interest.

Objectives

1) **Problem**

As museums house, numerous artifacts, potentially holding millions of artifacts with dozens of exhibits, many patrons of the museum will, at some point on their visit, lose their bearings and potentially miss out on visiting certain desired pieces.

The problem is that without an accurate mapping system with interactive capabilities, museumgoers must navigate their way through museums without direction resulting in visitors becoming lost, frustrated, decreased enjoyment and a possible decline in future museum revenue.

2) Goal

Our goal is to build a fully functional and convenient interactive mapping system through the Museums Assistance Program that is easy to use for all the different levels/types of users. This system will allow every visitor access to accurate information on the locations of galleries/exhibits within the museum and other places of importance (information desks, help centres, bathrooms, etc.). The interactive map shall be released as an android application, available to the general public to download and be downloaded on larger-scale digital kiosks.

3) Importance

A map is essential as it provides easy access to information about a person's current surroundings, including the location of restrooms, elevators, stairs, exhibit locations, gift shops and restaurants.

With the constant development and implementation of technology, an interactive mapping system will allow museums to continue with the trend and aid in informing/aiding guests, eliminate the need for paper/printout maps and attract more guests as traversal through the museum is easier.

Overall Description

Our software application will be able to provide all patrons of the museums included in the Museums Assistance Program (MAP) with an interactive map to aid in their experience. During development Android Studio will be used with the possibility of additional developmental tools (will be decided upon completion of our first milestone). The interactive map will list every point of interest in the museum, displayed on an accurate floorplan of the location, with optional navigational tools for further assistance if needed.

Process: Scrum

An agile software development process with its primary focus on the incremental development of software. The first phase of this process involves determining the features of the system design. Each element is in the form of a user story, with a collection of these stories forming the product backlog of the project, and from this backlog, we generate sprint backlogs. Development stages are known as

sprints, a period between 2-4 weeks long, during which the scrum team attempts to complete the elements presented in the sprint log. After each sprint, the scrum team reviews and demonstrates a demo version of what they developed during the sprint.

GitHub:

During the development of this project, GitHub will control and host all version releases, reports, meeting minutes, sprint review minutes and required documents for this development project.

- Link: https://github.com/ko19af/COSC_4P02_Project

Overall Time Plan

Team and Project Proposal: Tuesday January 17th by 23:59

Product Backlog: Tuesday, January 31st by 23:59

Sprint Backlog: Tuesday January 31st by 23:59

Scrum Meetings: Tuesday (4:00-5:00) or Thursday (4:00 – 5:00)

Sprint Review:

1. Friday February 3rd
2. Friday February 17th
3. Friday March 3rd
4. Friday March 17th
5. Friday March 31st
6. Friday April 10th

Progress Reports:

7. Tuesday February 28th, 2023, by 23:59
8. Tuesday March 28th, 2023, by 23:59

Final Presentation/Report: April 17th - 28th, 2023

Timetable:

Week	Goals to complete for week
Jan 20th	Perform research on different interactive map systems
Jan 27th	Generate User stories, complete the requirements specification, complete any necessary diagrams
Feb 3rd	generate product backlog and begin development on software
Feb 10th	Release first beta version of software
Feb 17th	Perform review and maintenance on released beta version
Feb 24th	Resume development on software
Mar 3rd	Generate first progress report and continue development of software
Mar 10th	Release second version of software
Mar 17th	Perform review and maintenance on second version
Mar 24th	Resume development

Mar 31st	Generate second progress report and continue development of software
April 7th	Complete final version
April 14th	Perform maintenance
April 21st	Present final product & watch other presentations
April 28th	Watch other Presentations

= Research/Planning

= Development/Refinement