COSC 4P02 Software Engineering II Proposal Brief

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Abstract: The purpose of this project is to create a fully functional user-friendly product that will be of assistance to the Niagara on the Lake museum and its visitors. It has been proven time by time that technology users are satisfied with applications that enhance user experience, is readily available, performs a service, and prioritize security. This project will implement these attributes to create a web-based Chat-Bot that aid users in seeking answers to their questions related to the NOTL museum, and will allow the museum admin to update information related to the museum in order to provide relevant and accurate answers to users.

1 OBJECTIVE

1.1 Problem and Importance

The NOTL museum is home to over 8,500 artifacts, 41,000 documents, 4,000 photographs, and 900 books, and has been a means to provide Canadians with the rich history that exists in the Niagara region (NOTL Museum, 2022). Since organizations have recognized that company development and technology are closely related, it is important for them to integrate software systems that maximize user knowledge and minimize problems that users face. Therefore, the problem the Chat-Bot will solve is to allow NOTL museum to provide users with rapid information that they don't currently have related to the museum. Ultimately, the NOTL museum can continue to grow in order to spread its mission, which is to promote and protect local heritage by staying connected to locals, where this problem can be solved through applications such as Chat-Bot. Chat-box can solve problems

that museum visitors have such as museum inquiry, directions-related questions, research questions, exhibit information, etc which will increase visitors and result in a memorable experience. This chatbot will be important to the NOTL museum because it will be able to automate customer service, resolve any inquiries, increase education, and will save time by immediately providing information that will take longer to seek from somewhere else. Ultimately, this project will result in a useful tool that will increase visitation, education, and visitor satisfaction.

1.2 Objectives and Overall Description of Project

The main objective of the application will be to solve user questions conveniently, rapidly, and accurately. The Chat-Bot will have two main features: one for visitors, and one for Museum Admin. Visitors will be able to select which subject they have inquiries about such as events, research and history, directions, about us, and general questions. After authentication, the museum admin is able to update information regarding each of these subjects in order to provide accurate and the latest information. In later versions, the application will be able to provide directions for navigating around the museum and will incorporate a language interpreter. Overall, the objective of the Chat-bot will be to deliver support to locals by stimulating conversation and engagement, as well as providing useful information to locals about the museum and about the artifacts they hold in their exhibits and being available and accessible to all tourists and Niagara locals with internet access.

1.3 Software Engineering Processes

The software engineering process that will be used to create this application will be Scrum. This specific software engineering process will be used so that customer requirements will be known by constantly checking in with the product owner. Scrum is also convenient for changing requirements leading to customer satisfaction, and will accommodate releasing versions of a within a short time frame, which in this case is within 4 months. Moreover, with each sprint the team is able to review what went well and implement improvements within the next sprint, resulting in improved and more productive versions leading to the final product. The product owner will be responsible for identifying the chatbot features

and requirements, as well as reviewing the product backlog. The Scrum Master's role will be essential for ensuring that the scrum process is followed, arranging daily meetings and sprint reviews. The development team will be responsible for completing product backlogs and creating the chatbot.

2 TEAM

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3 GITHUB

All deliverable code and documents will be uploaded to the following GitHub link below: https://github.com/Eckhoee/museum-mate/

4 TIMETABLES

Week of	Goals to be Completed
Jan 16	• Choose software project idea • Scrum meeting 17th and 19th • Decide on languages used, goals, roles, etc. • Start any preliminary research • Finish proposal brief
Jan 30	• Have second scrum meeting, sprint planning meeting • Complete research • Scrum meeting 31st and 2nd • Generate requirements • Create product backlog • Finalize requirements document (containing product backlogs, sprint backlogs, etc) • Begin development for first sprint
Feb 13	• Have 1st sprint review, implement changes • Scrum meeting 14th and 16th • Update requirements based on changing customer needs (if any) • Continue development for second sprint • Complete first version (with a basic front and backend) • Test first version • Release first version of chat bot
Feb 27	• Have 2nd sprint review, implement changes • Scrum meeting 28th and 23rd • Finish first progress review • Begin development for 2nd sprint with updated changes and requirements (if any) for second version • Test completed version after development
Mar 13	• Have 3rd sprint review, implement changes • Scrum meeting 14th and 16th • Begin development for 3rd sprint • Test second version • Release second version after development, will incorporate directions
Mar 27	• Have 4th sprint review • Scrum meeting 28th and 30th • Finish second progress review • Development for 4th sprint • Release third and final version, will implement language interpreter
Apr 10	• Test final version • Scrum meeting 11th and 14th • Plan and complete presentation • Complete final report • Release product • Practice presentation