**4P02 Project Proposal**

**Problem:**

The problem we face is everyone in today’s society is accepting and supporting new daily routines in their lives that involve technology where now they all have a demand for effortless experiences and want to be able to receive answers within seconds, not minutes for all their queries. We look to help solve this problem with the development of a chat box for Brock University to assist students as well as parents with any questions they may have and be able to provide them with the correct answers and/or resources. Our chat box will reduce the burden on the registrar staff who would regularly be taking on calls from everyone with questions as communication with any staff member could expend several hours. Hence can help reduce time and costs.

**Objectives:**

Based on the issue/problem that we have decided to resolve or encounter, our decision in developing a web application provides many benefits for the users of the website along with the organization. We have gathered/concluded on certain objectives based on our personal experience and analyses from the Brock University Website in order to provide such benefits to our users. During our development timeline, our focus will be to ensure that these objectives are met as they will also flow into certain functional and non functional requirements. These Objectives mainly include Usability,Reliability/Availability,User-Friendliness, Accessibility as well as Scalability. Our main intent within our objectives is to provide an readily integrated interface for our Users that visit the brock website so long as they require assistance on certain Brock Pages, or are lost within the website itself; the Chat Bot application will be able to provide the necessary resolution to assist such users. We look to have the Chat Bot application to provide Customer Service like skills to meet the needs and answer the specific questions that the user may have. We hope that our Chat Bot will make navigation within the website a lot smoother and easier by providing links to users that ask for navigation related questions. We will ensure that our Chat Bot is Scalable to ensure that any future requirements or requests of functionality can be added and developed in congruence with other functionality.

We look at our objectives and use them as a tool for our requirements building process. Chat Bot applications are very flexible as they can be used in many different ways. We will maneuver these uses and make it fit best with the Brock University Website and focus on the main User types that visit.

**Importance:**

The importance of this software/project is that it provides the user and visitors of the website with easier access to answers they need and in a more convenient way. Whether it be a new student looking for answers on registration or a current student that may need help contacting a specific department. There are many possible ways that this software will be helpful to anyone seeking information on Brock University. For example: If there were a new student seeking information on how to register for enrollment in Brock University; it may be difficult to maneuver through the website as there are so many pages and different links. A chat-bot is important because it can answer FAQ questions that we have implemented for it to answer and it can provide quick links to related articles based on their queries. This software will provide helpful information for anyone seeking information about Brock, especially as we see the amount of students coming in every year increase.

**SE Process:**

We decided to use the SCRUM software engineering process for building the Brock chatbot. We chose SCRUM because it is ideal for teams and it is simple. The core of every SCRUM project is the self-organized team and the SCRUM master. This methodology of software engineering relies on teams with clearly defined roles and promotes collaboration. SCRUM allows us to have daily short meetings that make sure we stay in communication, tackle problems, and brainstorm ideas together. In addition to these daily meetings, we also have a major meeting once every week to discuss what each of us did in said week and prepare for the following week. For many of us this is the first time creating and developing a product in a team setting so coming across uncertainties is inevitable. SCRUM is designed to handle these uncertainties which gives us the ability to adapt to changes in the future. In addition to that, SCRUM is a very transparent approach to SE. Having a product backlog that may grow or change based on the requirements guarantees information transparency such that any problems can be easily identified and dealt with. All in all, SCRUM is a framework that offers freedom of implementation. The repetition of iterations helps us to learn from the errors and reinforce what went well for each project and team.

**Overall Description:**

To conclude, Our problem is to assist those that have any questions regarding Brock and our solution is to create a chat bot that is able to provide that information. As a secondary goal this also would reduce the burden on registrar staff because creating a chat bot would be able to reduce the overall workload by attempting to answer any question a user may have about Brock which may have been asked to a registrar staff member. This chat bot will excel at usability as it is vital for anyone to be able to use the bot with little to no issues. We plan on using SCRUM as our steps towards completing our solution. We will have a major meeting every week Thursday at 4:30pm with every group member and SCRUM meetings daily once development has started. These daily SCRUM meetings will not be long compared to the regular Thursday meeting. Ultimately, this project will follow a linear path because we have already established our problem and how we plan on solving said problem through the use of a chat bot. Following this proposal the requirements and specification must be completed, then development must take place and lastly deployment of the final version of the product. We will be taking long strides towards our goal without deviating from the path.

**Members:**

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**GitHub:**

<https://github.com/TirthM/4P02-Final-Project>

**TimeTable**

**January**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Sun | Mon | Tues | Wed | Thurs | Fri | Sat |
|  |  |  |  |  | 1 | 2 |
| 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 10 | 11 | 12 | 13 | 14  Proposal Meeting 4:30 pm | 15 | 16 |
| 17  Proposal Due | 18 | 19 | 20 | 21 Requirements discussion meeting 4:30 pm | 22 | 23 |
| 24 | 25 | 26 | 27 | 28 Requirements discussion meeting 4:30 pm | 29 | 30 |
| 31 |  |  |  |  |  |  |

**February**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Sun | Mon | Tues | Wed | Thurs | Fri | Sat |
|  | 1 | 2 | 3 | 4 Requirements finalize meeting 4:30 pm | 5 | 6 |
| 7 Requirements Due | 8 | 9 | 10 | 11  Big Scrum Meeting  4:30 pm | 12 | 13 |
| 14 | 15  Scrum meeting  10:30 am | 16  Scrum meeting  10:30 am | 17  Scrum meeting  10:30 am | 18  Sprint Review  Assign new work from backlogs  4:30 pm | 19  Scrum meeting  10:30 am | 20 |
| 21 | 22  Scrum meeting  10:30 am | 23  Scrum meeting  10:30 am | 24  Scrum meeting  10:30 am | 25  Big Scrum Meeting  4:30 pm | 26  Scrum meeting  10:30 am | 27 |
| 28 |  |  |  |  |  |  |

**March**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Sun | Mon | Tues | Wed | Thurs | Fri | Sat |
|  | 1  Scrum meeting  10:30 am | 2  Scrum meeting  10:30 am | 3  Scrum meeting  10:30 am | 4  Sprint Review  Build Version 1 release  Assign new build product items. Report for version 1  4:30 pm | 5  Scrum meeting  10:30 am | 6 |
| 7 | 8  Scrum meeting  10:30 am | 9  Scrum meeting  10:30 am | 10  Scrum meeting  10:30 am | 11  Big Scrum Meeting  4:30 pm | 12  Scrum meeting  10:30 am | 13 |
| 14 | 15  Scrum meeting  10:30 am | 16  Scrum meeting  10:30 am | 17  Scrum meeting  10:30 am | 18  Sprint Review  Assign new work from backlogs  4:30 pm | 19  Scrum meeting  10:30 am | 20 |
| 21 | 22  Scrum meeting  10:30 am | 23  Scrum meeting  10:30 am | 24  Scrum meeting  10:30 am | 25  Big Scrum Meeting  4:30 pm | 26  Scrum meeting  10:30 am | 27 |
| 28 | 29  Scrum meeting  10:30 am | 30  Scrum meeting  10:30 am | 31  Scrum meeting  10:30 am |  |  |  |

**April**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Sun | Mon | Tues | Wed | Thurs | Fri | Sat |
|  |  |  |  | 1  Sprint Review  Build Version 2 release  Assign new build product items. Report for version 2  4:30 pm | 2  Scrum meeting  10:30 am | 3 |
| 4 | 5  Scrum meeting  10:30 am | 6  Scrum meeting  10:30 am | 7  Scrum meeting  10:30 am | 8  Big Scrum Meeting  4:30 pm | 9  Scrum meeting  10:30 am | 10 |
| 11 | 12  Scrum meeting  10:30 am | 13  Scrum meeting  10:30 am | 14  Scrum meeting  10:30 am | 15  Sprint Review  Assign new work from backlogs  4:30 pm | 16  Scrum meeting  10:30 am | 17 |
| 18 | 19  Scrum meeting  10:30 am | 20  Scrum meeting  10:30 am | 21  Scrum meeting  10:30 am | 22  Big Scrum Meeting  4:30 pm | 23 | 24  Finish Final Release,  Report and  presentation |
| 25 | 26  Final Presentation  (Time TBD) | 27  Final Presentation  (Time TBD) | 28  Final Presentation  (Time TBD) | 29  Final Presentation  (Time TBD) | 30  Final Presentation  (Time TBD) |  |