# COSC 4P02 Group Proposal

Git Project
GitHub - COSC 4P02

## **Team Members**

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## Objectives

The product will be a software chatbot application. This will be available either as a web app or a standalone application. The product will allow interface between a user interface, where end users can log in, and interact with the chat bot. An API which will be used to provide data through various parts of the product. A database for storing data on the summer games, brock information, and user accounts and history. Finally, the product will implement a natural language processor which will be used to provide responses to users' questions and provide accurate and informative information.

The interface should be accessible through various means, a webapp will be implemented that will allow support for all devices with an internet browser. Anyone with a mobile phone, laptop, desktop, or tablet will be able to access the full functionality of the product. The front end will be made to adapt to various screen sizes and resolutions.

The API will be the major data handler of the system. Data pulled into the database will flow into the database using the API, data requested from the front end will access API endpoints that will securely retrieve relevant information from the DBMS. Login and security will be handled security with the API as well. Furthermore, the natural language processor will feed responses and queries back and forth via this API.

The DBMS system used will simply store multiple tables with the appropriate information. Schedule timings, events, as well as tables for user information and history of chat messages. All of these will be queryable and editable with the proper authority. The database logs will facilitate bug fixing and future maintenance of the product.

Finally, the natural language processor is the fundamental point of the product. This will interact with the database as well as the frontend to understand user queries and return appropriate information. The algorithm should be able to understand simple questions and should be able to access relevant information from the database.

## Software Engineering Process

For this project our team will be using the agile Scrum process method. This will allow us to use biweekly sprint system. This means each sprint will last 2 weeks. Our team lead will be the scrum master. We will have bi-weekly meetings. With the option to add extra meetings when needed. We will be using ZenHub as our scrum management system which is an addon to GitHub to help keep all our team data centralized. We will also use Microsoft One Note to store and track our meeting one notes.

## **Timetable**

Week of	Goals
Jan 17	- Generate user stories
	- Create Product Backlog
	- Create Sprint Backlog
Jan 24	- Infrastructure Setup
	- R&D
Jan 31	- Start Development (First Sprint)
Feb 14	- End of first sprint.
	- Release of version 1
Feb 28	- 2 <sup>nd</sup> Sprint
March 14	- End of 2 <sup>nd</sup> sprint.
	- Release of version 2
March 28	- 3 <sup>rd</sup> Sprint
April 11	- End of 3 <sup>rd</sup> sprint
	- Release of version 3
April 18	- Final Release

## Weekly Meeting Schedule

Our weekly meeting will be 5:30-6pm EST during the proposed class time.

Our sprint retrospectives will happen during our Friday meetings.

#### Course Due Dates

- 1. Project Proposal
  - a. Due: Monday Jan 17<sup>th</sup> by 23:59
- 2. Product Backlog and Sprint Backlog
  - a. Due: Monday Jan 24<sup>th</sup> by 23:59
- 3. Progress Reports
  - a. Due: Monday Feb 28th by 23:59
  - b. Due: Monday March 28th by 23:59
- 4. Final Demonstration April 18<sup>th</sup> to 30<sup>th</sup>