

MIS 3640 Term Project Proposal

ChatBot

Team Members:

Josephine Boenawan

Gianca Devina

Paul Han

Theresia Susanto

1. The Big Idea:

What is the main idea of your project?

- To create a chatbot on Facebook as a resource for users about ongoing events in their vicinity.

What topics will you explore and what will you generate?

- Events located near you or by location.
 - Different types of events (e.g. entertainment, food, pets, festival, music)
 - Venue, time
 - Number of hits (how many people going, how many people interested)

What is your minimum viable product?

- A casual conversation with the chatbot and the chatbot is able to reply the user. It will yield a result of list of events. Then, the user can input a specific event on the list that he/she is interested in and the chatbot will output more details about the event (time, location, etc.)

What is a stretch goal?

- The chatbot will integrate machine learning. Learns what the users' interests and adjust the events offered accordingly
 - Customization for each user. (by name, by location, use the cookies to keep track of their previous events)
- The chatbot will suggest recommendation of events based on the user's history and previous searches.
 - The chatbot will be able to apply filter based on different events categories (eg: only concerts, no food-based events, etc)

2. Learning Goals:

Individual Goals:

- Gianca: Understand APIs, what they do, and how to use them appropriately
- Josephine: To explore the extent of what Python can do. Have fun while learning.
- Paul: Learning how to effectively work in a team that has various levels of experience in programming.
- Theresia: To fully grasp Python capabilities and improve coding skills

Team Goals:

- To communicate and work effectively as a team.
- To create a good team dynamic that motivates one another to do their best
- Successfully create a useful application
- Gain a better understanding of Python's depth

3. Implementation Plan:

1. Identify potential framework or library for our project. (e.g. Google Maps API for location, use the Facebook Messenger API to use Facebook Messenger Discover feature as the UI for the bot).
2. Narrow down list of websites we want to scrape from.
3. Scrape events from a website that posts about upcoming events.
4. Determine what functions we want the computer to do.
5. Make a list of independent tasks needed to complete the project.
6. Separate and assign independent components/ tasks to each person.
7. Integrate all components of the project - assure that the components are able to work together.
8. Fix bugs or errors.
9. Re-test everything to ensure complete integration between components.
10. Ensure Heroku can host the app.
11. Testing of Chatbot as user.

4. Project schedule:

Week 1 (Oct 9 - Oct 15):

- Project Proposal
- Figure out project scope

Week 2 (Oct 16 - Oct 22):

- List out potential functions and commands that we need
- Identify what tools we need (APIs, website to scrape from)
- Divy up the task to individual members

Week 3 (Oct 23 - Oct 29):

- Establish a basic working bot

Week 4 (Oct 30 - Nov 5):

- Continue to write additional functionalities

Week 5 (Nov 6 - Nov 12):

- Design Review
- Testing & Modifications

Week 6 (Nov 13 - Nov 19):

- Code Review
- Testing & Modifications

Week 7 (Nov 20 - Nov 26):

- Thanksgiving break
- Come up with a name for the bot

Week 8 (Nov 27 - Dec 4):

- Mid-project Presentation
- Create project website
- Host the app

Week 9 (Dec 4 - Dec 7):

- Create README document
- Demo Session

5. Collaboration plan:

Our plan is to complete the tasks independently and integrate it two weeks before the final assembly of the project. This strategy will ensure that every team member is assigned to a task, hence, contributing to the project equally and share some responsibility toward the completion and success of this project. It also helps to motivate each member through contribution of a skill or completion of task. Although we agreed to have a task assigned to us individually, communication is our top priority and we will do so if we come across a problem or issue so we can solve it together as a team if necessary.

The project will be broken up into milestones. For each milestone, tasks will be divided as evenly as possible between all members. When possible we will work independently; one person's task is not dependent on the completion of another person's task. In the case that one person has a dependency on another person, they will be responsible for meeting together and completing that portion of the project. Our goal is to have weekly meetings/ check- ups to make sure that everyone is on track.

6. Risks:

What do you view as the biggest risks to the success of this project?

- Segregating independent tasks within team members and making sure it integrates well.
- Time management.
- Limited resources/skills.
- Defining a clear scope for the capabilities of the project.

7. Additional Course Content:

What are some topics that we might cover in class that you think would be especially helpful for your project?

- Scraping a website
- File sharing tips/Team environment setup
- Working with APIs
- Hosting an application