# UGAHacks Project Log

## Project Information

**Project Title:** Sound Sync

**Team Members:** Hannah Le, Aparna Sajith, Jovita Chang, Raj Sureka

**Tier Level:** Intemediate

**Project Description:**

Prompt the user to create a user profile by asking them questions such as the instruments they play or the role they want in the band. Match the user profile to a band that fits them most. Bands will also create profiles to find individuals they desire in their band.

## Friday

**Goals:**

* Goal 1: Work on the backend by looking at documentation for MongoDB atlas and LangChain.
* Goal 2: Plan the website UI.
* Goal 3: Brainstorming and getting a clear idea of the project.
* Goal 4: Work on the front end using HTML/CSS and JavaScript.

**Progress:**

(Describe what was accomplished)

* Finished coming up with the idea of the project
  + Decided on the name, purpose, images, theme, etc.
* Implemented UI
  + Designed the landing page and an About page.
* Added a function to generate band members and bands for testing
* Worked on client class to search for members and bands
* Worked on effectively querying the MongoDB collection

**Challenges**:

1. Challenge 1: The team had a tough time choosing between Streamlit (Python) and other options for the front-end. Initially, Streamlit was chosen but later dismissed because it was considered too closely tied to the backend, which was also in Python. We explored Figma and converting it into another language.

- Solution (if found): Ultimately, we chose HTML, CSS, and JavaScript to build the front-end, for flexibility and separation from the backend.

2. Challenge 2: Front-end figuring how to work on UI at the same time. Also, having to wait for the other team members to finish their part before starting.

- Solution (if found): Decided to work on different pages.

3. Challenge 3: inability to integrate with MongoDB, flask, HTML, and CSS

* Solution (if found): decided to consult the extensive documentation for MongoDB and found multiple ways to commit to the database

**Learning:**

(List key concepts or skills learned)

* How to balance the workload between team members
* How to work with Streamlit
* How to work with multiple components in project like this
* Python basics
* Working with mongoDB atlas and OpenAI

**AI Usage (if any):**

***Tool used***:

***Purpose:***

***How it contributed to learning***

## 

## Saturday

***Saturday is the longest day of the Hackathon! The bulk of your project will get done within today, so set your goals wisely!***

**Goals:**

* Goal 1: Finish the entire UI/UX of the website
  + Finish all pages
* Goal 2: Finish the backend
  + Work on the matching algorithm
* Goal 3: Combine/incorporate frontend and backend.
  + Integrate form requests
* Goal 4: Create a persona generator for bands using AI

**Progress:**

(Describe what was accomplished)

* Worked on inputting users into members database and bands database
* Finished creating all the pages required for a functioning website
* Had a baseline for design across all pages in this case

**Challenges**:

1. Challenge 1: We encountered difficulties due to a disengaged teammate who did not fulfill their assigned responsibilities.

- Solution (if found): Redistribute tasks among the rest of the team members

2. Challenge 2: Integrating CSS with JS

- Solution (if found): To adapt, we refined our approach, focusing on functionality over complexity and setting aside certain creative elements.

**Learning:**

(List key concepts or skills learned)

* HTML/CSS elements
  + Responsive design
* Working with Flask
* Working with Open AI API

**AI Usage (if any):** Generative AI

***Tool used***: OpenAI

***Purpose:*** Recommendation text: A description of why an artist and band match.

***How it contributed to learning:*** Allows us to analyze the reasons for why an artist and band has matched together.

## Sunday

***Submissions are due at 8AM today!! Fit in your final touches for the project and make sure to check the submission checklist below to ensure you’re ready for judging!***

**Goals:**

* Goal 1: Testing website
* Goal 2: Practice presentation
* Goal 3: Create a demo video

**Progress:**

(Describe what was accomplished)

* Updated the devpost for the project
* Created a project demo video
* Testing the website with test cases
* Last minute touches to project

**Challenges**:

1. Challenge 1: Getting MongoDB and JavaScript to work

- Solution (if found): Persisted through troubleshooting and experimented with many methods.

2. Challenge 2: Lack of time; we barely had enough time to finish the project and even then, we had to submit an incomplete project

- Solution (if found): We were able to submit what we had and we were able to record the video just in time.

3. Challenge 3: Created interface that was unable to be used at certain points for confirming if a user was in the database already or not

* Solution (if found): we ended up using an interface for adding to our specific MongoDB collection and then using pymongo to check if users are present in database after logging and registering

**Learning:**

(List key concepts or skills learned)

* How to work under pressure
* How to use Jinja and incorporate it into the HTML
* How to thoroughly look over documentation for newer tools

**AI Usage (if any):**

***Tool used***:

***Purpose:***

***How it contributed to learning:***

## Submission Checklist

***Make sure to submit on the UGAHacks \_\_*** [***Devpost***](https://ugahacks-x.devpost.com/) ***at 8AM on Sunday!***

* Project Github Repo
* Readme file (summary of project log)
* Completed Project Log as PDF
* Live Project Site (optional)