Proposal for UCI Web Channel

Synopsis

I am a second-year student with an irresistible urge to contribute to open-source projects. The **UCI Web Channel project** is the best choice for me, through which I can give my contribution to a project which is useful for the people of my country.

1. Relevant skills and motivation

(i)

- I am a Full Stack MERN developer.
- I have used the tech stack which includes MongoDb, Express.js, React.js, Node.js.
- I have a good command of the language Javascript which is also used in the project.
- All my personal projects are made using the React.js library.
- I have also worked with **Web-Sockets** in my projects.

(ii)

Reading the whole perspective of UCI Web Channel, I related with it instantly. Communication is very prominent in both personal and professional sectors. Like governments have to send information/nudges to citizens or updating parents on their child's academic performance. For all these tasks an Automated Bot is required which this project can fulfil.

2. Project Details

(i) Project Overview

Working

- The **UCI Web Channel** works mainly on the communication part which is used tremendously in every sector of the society.
- Starting from schools where the parents have to update for their child's academic performances, the government has to send many updates and information to citizens regarding expiration of their government documents like Driving Licence, Aadhar Cards etc.
- It is a configurable platform to enable personalised chatbot communication across channels such as whatsapp, Telegram, AMS, email and more.

• With UCI we can plugin any federated set of users, any micro experience generating transformers and any distribution channel adapters.

(ii) Implementation Details

As all my projects are made in React.js I can handle the UI of the project which will include:

1. Sidebar with recent chats similar to WhatsApp

- I will be making the UI of the bot app.
- The UI of the bot will be similar to whatsup which will show the recent chats and also emojis to use during the converstaion.
- I will be making the UI of the app using the React.js library
- All my projects as you can see in my resume are made in React.js so it's really easy for me to build this.
- Using languages HTML, CSS, Javascript.

2. File/media sharing

- The Files/Media sharing feature will also be integrated along with this as you can see in the Figma file
- You can share Video files, text files, videos etc
- All the icons which will be used in the app will be available to me using the package material-ui/icons.

3. Users list for searching

- This will show the list of users who are there in the chatbot
- I will take the fonts used in the app from Google Fonts
- All the code will be written in JSX

4. Video Calls

- We can also feature Video Calling in this chatbot which will integrate real time communication.
- For the video calling feature I will use Agora
- Checkout this link for more details: https://www.agora.io/en/blog/build-a-video-calling-app-using-agora-in-a-react-project/

6. Persistence of messages/Fetching Older messages

- All the older messages and chats will be saved and will be visible when you will click on the respective user's chat you want to see.
- The Bot app will provide a live chat platform that allows users to collaborate and connect with customers.
- I will be making the use of Hooks like useState, useRef, useEffect etc.

I have made many projects and I have a good understanding of using API's, packages, libraries and also solving bugs. You can check out my projects on GitHub.

-> For the authentication part of the project:

- I can make the whole authentication of Log In, Sign Up through proper code using Node.js, Express.js,JWT tokens.
- I can also set up Google authentication.

The figma file contains all the designs which can be viewed using this link:

https://www.figma.com/file/qQvV6XY9iMBUfKMMG3va5J/UCI-web-channel-(Copy)?node-id =0%3A1

Timeline

- As the UI of part of the project includes a lot of tasks to be done, So it will take at least
 2-3 weeks to complete this part
- The authentication can be under one week
- And other tasks like Fetching older messages, persistence of messages in included in the backend so this can be done within a time frame of 1-2 weeks depending on the amount of errors and other technical circumstances.

Future Development

I would like to contribute to UCI Web Channel after GovTech and will be available to resolve issues and manage pull requests. Even if I am not selected this year, I will like to help this project by solving issues, suggesting new ideas and participating in discussions.

Availability

- I don't have any exams approaching as of now.
- I will have my 4th semester exams in July, dates have not been disclosed yet.
- But I can contribute my full time to this project without any loss.
- I don't have any part-time or full-time jobs or internships planned for this summer till now, but in future if something occurs I will be informing you on the first basis.
- I can contribute upto 15-16 hours per week for this project.

Personal Background

- I am a second-year student pursuing Btech and also a Full-stack web developer.
- I have participated in many hackathons making web projects.
- For the frontend I have used React.js. All my projects are done in React.js.
 Using languages HTML, CSS, Javascript.

- For the backend, I have worked with MERN backend technologies (
 MongoDB, Express.js,Node.js, React.js) so I can contribute in both ways.
- I have been doing development for a good time now and have also done many projects
- Also I have also contributed to some open-source projects during GSSOC
 2022 with accepted PRs.
- I have also contributed to Datree (a CNCF) project and am constantly looking for more projects to contribute.
- Nowadays I am also contributing to projects called **Electron** and **trivy**.
- I am a Postman Student Expert

As the project uses the tech-stack which is the same tech-stack I have been using in all my projects, I understand the code-base very proficiently. I do relate a lot with the whole concept of the project UCI Web Channel, as I recently wrote a proposal for **GSOC 2022** in which I had to work with a GitHub bot so I can contribute to this project very efficiently. I have participated in many hackathons making projects so I know how to work in a team and also very dedicated towards my work.

 $\textbf{Resume:} \underline{https://drive.google.com/file/d/1Sr_Ov6yuDa08tWFjZ0ZSbbq47St3Kzih/view?usp=} \\$

sharing

GitHub: https://github.com/Kanika637 **Twitter**: https://twitter.com/gola_kanika

LinkedIn: https://www.linkedin.com/in/kanika-gola-34778a203/

Thanking Note

Thank you so much for taking out time and reading my proposal, I will wait patiently for a positive response from your side.