**Project Proposal**

**Group ID: 4**

1. **Project idea:**

* Our project is an AI Copilot that leverages AI Agent to provide real-time, tailored responses across various topics. Ideal for students, professionals, and tech enthusiasts, it offers quick, reliable information, aiding in productivity, learning, and decision-making.
* ​​The Copilot democratizes access to useful guidance, especially valuable for users with limited resources or in remote locations.

1. **Project’s target users:**

* The target users for this tool are based on both B2B and B2C models, focusing on individuals aged 18 to 55, specifically including students, office employees, and business organizations aiming to use a tool with an integrated AI agent to enhance their productivity.
* **B2B (Business to Business)** and **B2C (Business to Consumer)** are two common business models:

1. **B2B (Business to Business)**: This is a business model between companies. Instead of selling directly to consumers, B2B companies provide products or services to other companies. For example, component manufacturers sell their products to assembly companies, or software companies offer services to businesses.
2. **B2C (Business to Consumer)**: This business model involves companies selling products or services directly to end consumers. This model is common in retail and e-commerce, where individual consumers are the ones purchasing goods for personal use.

* This application allows users to build knowledge for an AI agent, such as business rules and policies. This way, users can ask the AI questions about daily tasks or even share the AI agent with others, allowing them to query the knowledge that has been builded.

1. **Technical solution:**

* Frontend: React
* Desktop: Web application built with React.js.
* Responsive design for compatibility with various screen sizes.
* WebSocket for real-time communication with the backend.
* Mobile: Mobile application built with React Native.
* Cross-platform support for both iOS and Android.
* WebSocket for real-time communication with the backend.
* Backend: Node.js
* Node.js with Express.js for handling API requests.
* RESTful API to handle requests from both desktop and mobile clients.
* WebSocket server for real-time communication.
* Middleware for authentication and authorization using JWT.
* Al Engine: GEMINI
* Database: MongoDB
* Collections for users, chat history, and session data.
* Indexing for efficient querying and retrieval of chat history.

1. **Project’s user story:**

* Define: A **user story** is a brief, informal description of a software feature from the perspective of the end user. Both stakeholders and non-stakeholders are capable of describing their story to show their need for enhancing technical items which have been being worked on by the developer team.
* As Luat, a student of US - VNU, I want all of my research on this application to be confidentially secured and I need to see multiple Agents, one of which is specialized for their field, so that I can work on many subjects separately. I also want to log in with a Google or Microsoft account.
* In order to examine my employees' work as well as archive our data, as a CEO, I demand for a history section for every account in my company.
* As an office employee, I need this product to include features that can handle prompts such as categorizing prompts by their typical characteristics. Additionally, I want to have the ability to manually save my favorite ones which can be accessed in the app.
* As a corporate business, we want to have an app to push our productivity in our upcoming projects. We want the AI Copilot to quickly provide industry insights and competitor analyses, so that we can make data-driven choices without spending time on extensive research. We also want to have the prompt library to access the old prompt easier.
* As a product manager launching a new feature, I want the Copilot to gather user feedback data and analyze trends, helping me identify key improvement areas and validate our roadmap efficiently.
* As a data analyst working with large datasets, I want the Copilot to assist in exploratory data analysis and visualization, helping me uncover patterns quickly and present data effectively to stakeholders. I would also like to put my own dataset to the AI chat for it to explore and answer my own questions.

1. **Tool setup:**

* Link github repo: [Github](https://github.com/quandeptraiprovip/AICopilot)
* Link google drive: [Intro2SE - Group 4](https://drive.google.com/drive/folders/1rgoBmGKYDL44TFprV8xqws_y7h6qdAZe?usp=drive_link)
* Task assigned on Jira:

