Unstuck: Academic Paralysis App

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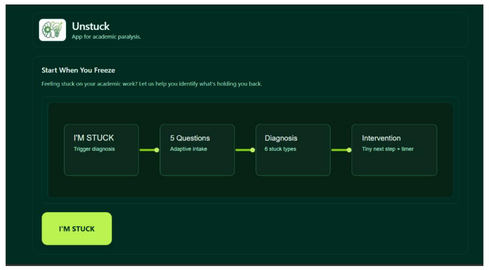
Motivation

Academic paralysis is the inability to stay productive due to mental and emotional obstacles such as anxiety, burnout, and overwhelm; a widespread struggle amongst students. Despite its prevalence, existing tools for its mitigation are rare, ranging from basic task managers to mental health resources, that don't sufficiently address the cognitive and emotional barriers behind the paralysis.

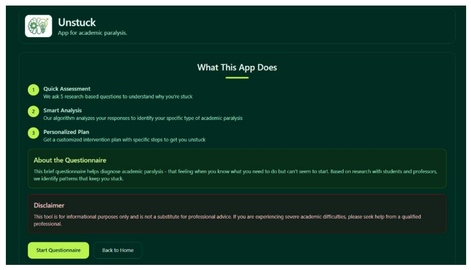
Target Audience

Our app is targeted mainly towards students aged 14 to 21, because these students are typically under more mental and emotional stress. Our application aims to provide high school and college students with an app that identifies a reason for their paralysis and generates a personalized intervention plan to overcome it.

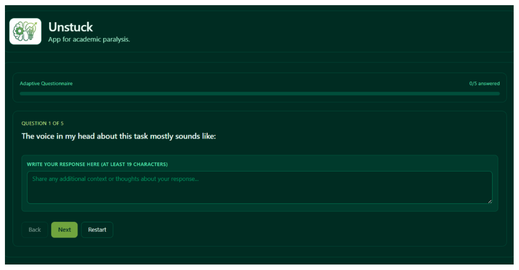
Key Features & App Design



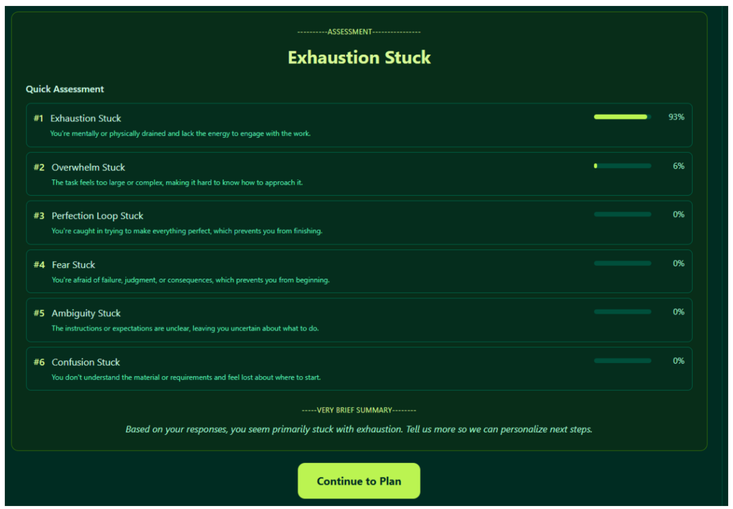
Home Page: Gives users a brief description of the workflow. Has the "I'm Stuck" button.



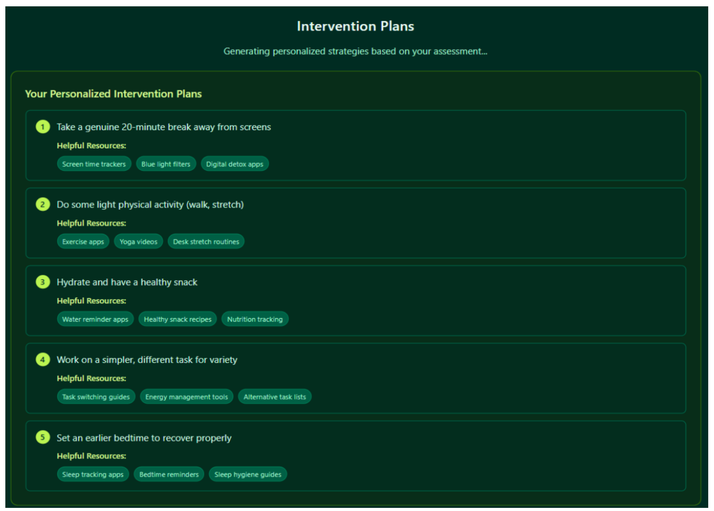
Disclaimer Page: Explains what the app does and gives a disclaimer



Questionnaire: Asks questions & follow-ups to gain more context on user's situation and determine cause of academic paralysis



Responses analyzed using a Sentence-BERT word embedding model & logistic regression model to output stuck type and probability.



Generate a personalized intervention plan by feeding results from Sentence-BERT's and logistic regression model to Gemini

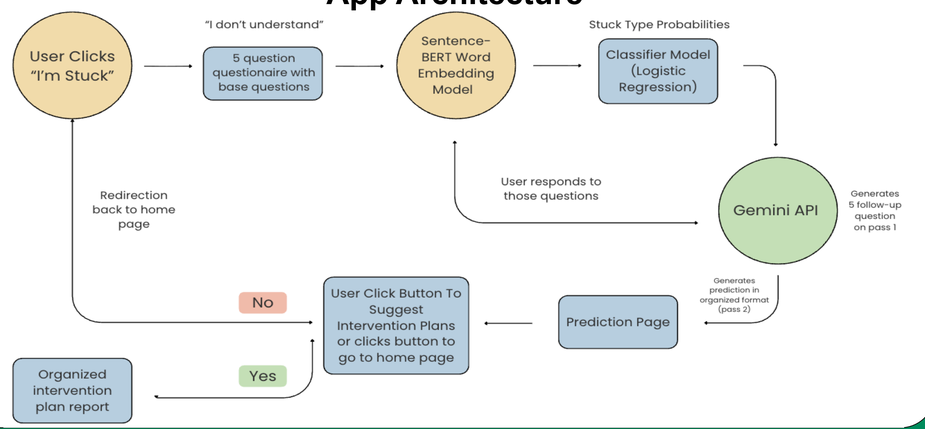
Algorithms Developed

- **Developed our own logistic regression model to analyze words from the user's responses from the BERT Model to word embedding vectors**

Tools Used

Open Router - To generate an intervention plan based on user responses

App Architecture



Future Extensions

- **Solve dependency issues with VS Code**
- **Training our model on real human data to improve the accuracy of the diagnosis**
- **Including a calendar or Pomodoro counter feature for the users to use based on their stuck types**
- **Add a currency system to gamify the app**
- **Creating our own AI model to reduce limitations with Gemini API key**