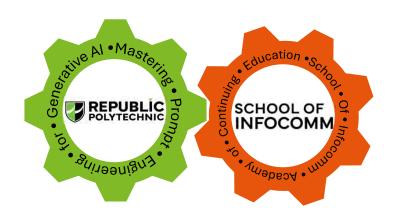


2025

Project Briefing



REPUBLIC POLYTECHNIC

Project Ideas



Homework Helper and Study Buddy:

The app can act as a 24/7 homework helper or study buddy, assisting students with their school assignments and providing explanations on a variety of subjects. Whether it's solving math problems, giving tips on essay writing, or explaining scientific concepts, these applications can offer personalized support and help reinforce learning outside of the classroom. This can be particularly helpful for students who may need extra help or those who want to explore topics beyond their school curriculum.



Content Creation and Curation:

LLMs are capable of generating creative content, including articles, blog posts, marketing copy, and even poetry or fiction. They can also curate content by summarizing articles, generating abstracts, or creating content briefs. This application is particularly valuable for content marketers, publishers, and digital agencies, as it can significantly speed up the content creation process and offer new perspectives or ideas.



Fantasy Sports Strategy

Assistant: Fantasy sports are quite popular among teenagers. An LLM-powered app could assist in creating and managing fantasy sports teams. It could analyze player statistics, team performance, and other relevant data to offer suggestions on team selection, trades, and lineup decisions. This application would not only be engaging but also help students learn about statistical analysis and strategy.

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Team and Brainstorming

- 4 to a team
- Post the following to the Padlet [https://for.edu.sg/cghzqn]:
 - Team name
 - Problem statement
 - Roughly describe which part of the problem statement your project will attempt to solve
 - Team member names

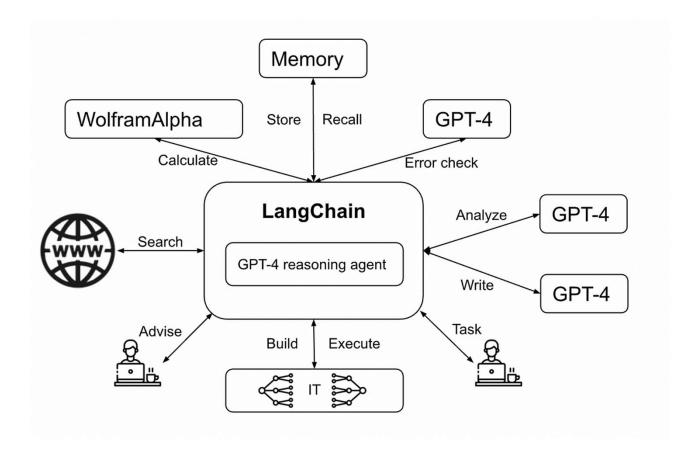


Project Development & Sharing

- Each team will be given
 - o 60 mins to work on the prototype on Day 2,
 - o 120 mins (including tea break) on Day 3.
- Each team will be given 10 mins to share their project, 5 mins for qna
- Suggested sharing outline
 - o Problem statement (What is the problem we are trying to solve)
 - o Project statement (what is the project about)
 - o Project design
 - o Demo
- Your proposed solution should use the langehain framework.
- You must evaluate your solution's performance using LangSmith to balance cost and latency, ensuring they can identify trade-offs and optimize resource usage effectively.
- Each participant will vote for their favourite project at the end of the day. The project with the highest number of votes will win a prize.

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Project Development



Past submissions

Problem statement:

Programmers often do not have time to add comments to their code, which leads to other collaborators on the same project being unable to understand the code written by one person.

How we intend to solve the problem statement: GPT-4 can be utilized to add comments that explain complicated blocks of code, solving the issue of programmers not being able to write comments in their code by allowing the entire block to be commented in one go

Problem statement

It is difficult for non coders to get into the coding scene / O level students to revise for exams.

We will make an beginner and user friendly website that uses ChatGPT to make simple questions for all the various topics of Pythons. We will leverage off ChatGPT to explain code part by part in a user friendly way and give them increasingly difficult questions to work with, as well as mastery tests. This will act as a good way for one to learn coding as a complete beginner for low cost and allow them to graduate into more challenging platforms like codewars.com

Project Time











Presentations











Vote for the Winners







Winning

Team



Thank you!