

# Investigating the utilisation of AI tools such as ChatGPT in Students

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## Proposal

### Motivation

As technology continues to evolve and integrate into educational practices, there is an increasing need to understand how these tools are employed and the impact they may have on students' academic success.

### Aims

The purpose of the project is to develop a system that will allow us to investigate the students' experiences and perceptions when using generative AI tools.

### Progress

- Analysis section is complete including: background research, existing/similar products and the functional and non-functional requirements of the system
- Design section is complete consisting of a System Architecture Diagram, a Use-Case Diagram, Entity Relationship Diagram and wireframes of the system.
- Implementation is almost complete, as it stands right now the system could be used as a Minimum Viable Product
  - The system has sign up/login functionalities in order to store user information required for the research
  - There is functionality for the quizzes implemented
  - The AI chat-bot has been successfully integrated into the website

## Problems and risks

### Problems

For the most part it has been relatively smooth sailing, however there was one issue with integrating the AI Chat-bot using the Open AI API. The API requires payment, however with a new account you get \$5.00 of credit for free so I created a new account and that credit limit has not been exceeded yet in my testing of the system

## Risks

*[What problems do you foresee in the future and how will you mitigate them?]*

I foresee 3 potential issues:

- Recruiting enough participants for the evaluation side of the project
  - Utilize the social media platforms available such as Discord servers for all years in the school.
- The free account credit running out midway through the evaluation
  - Creating a new account right before we start the evaluation process
  - Limit the character count users can prompt the chat-bot with to minimize cost of an API request
- Balancing workload of courses and writing the dissertation (especially as we progress into the semester with coursework and exams)
  - Stick to the gantt chart timetable I made at beginning of semester 1
  - Compromise and cut out 'nice to have' features if running out of time
  - Prioritise this project over courses as this is worth significantly more credits

## Plan

First week of January (before semester 2 begins), finalise the implementation. Aim to have the site hosted online by end of week 1 semester 2. In January, design the survey for participants to complete. Find participants for the evaluation during February/March. While waiting for participants write up the dissertation. Evaluate results at end of February/March and finalise the dissertation and presentation before submission.