SECP 1513

TECHNOLOGY AND INFORMATION SYSTEM

Section : 02

Lecturer:

Dr Aryati binti Bakri

Digital Thinking Group Assignment
[Artificial Intelligence]

Group 4 Members:

No	Name	Matric No
1	LAU YAN KAI	A23CS0098
2	BRENDAN CHIA YAN FEI	A23CS0211
3	NEO LI XIN	A23CS0253
4	LEE YIN SHEN	A23CS0236

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Introduction

Design thinking is a philosophy and a set of tools to help us solve problems creatively. According to MIT Sloan School, design thinking is an approach to solving complicated problems that we are facing, and it is a means of exploring the best future states with systematic reasoning and intuition.

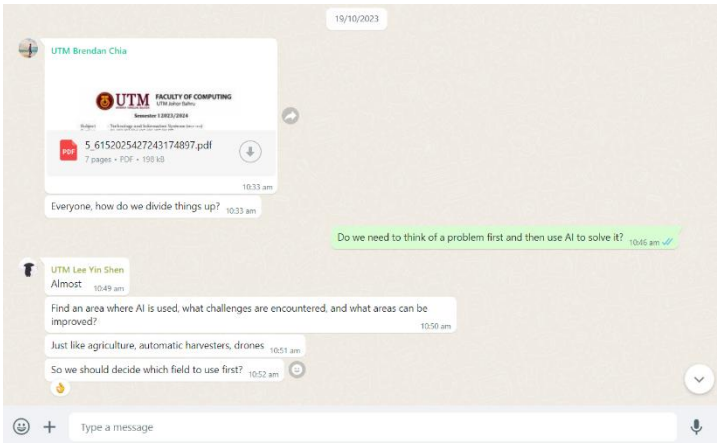
Artificial Intelligence (AI) is facing a rapid evolution. As a developing country, Malaysia is also passionate in AI development to stay competitive globally. However, challenges arise. This design thinking project is to identify the challenges in the field of AI in Malaysia and come up with innovative solutions. We are going to conduct each of the five phases in design thinking, which are empathize, define, ideate, prototype and test to thoroughly understand the AI development in Malaysia.

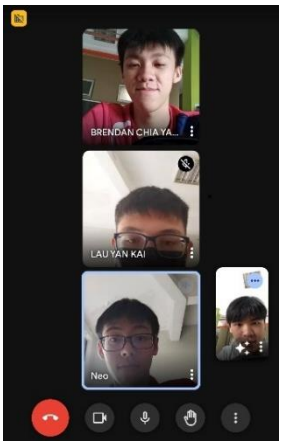
[127 words]

Project Timeline

[22 October 2023]

Project Kick-off & First Meeting **[Empathy]**

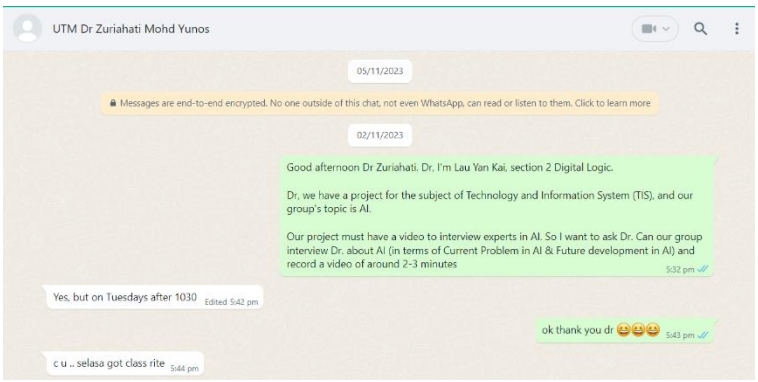


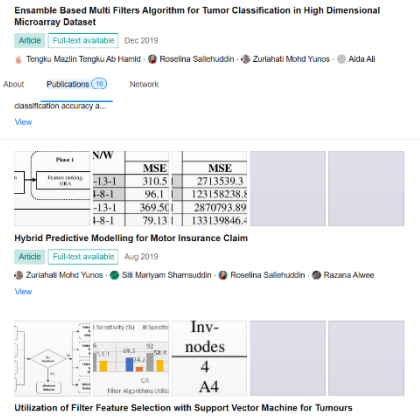


We created a WhatsApp group which we discussed and selected our group topic - AI. Then, we have come out with a list of potential lecturers with area of expertise in AI to have an interview session.

[2 November 2023]

Request Permission from Expert **[Empathy]**

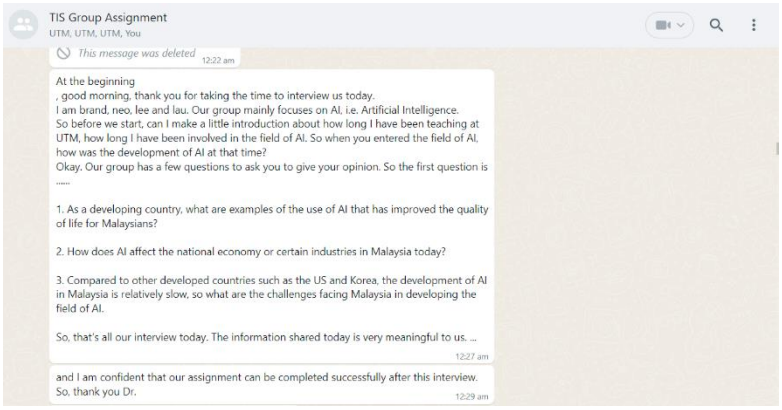




We contacted potential lecturers and requested their participation in our interview session.

[5 November 2023]

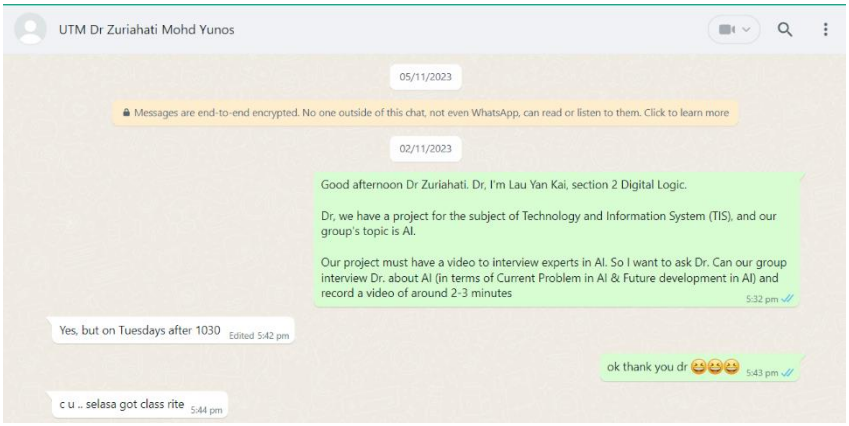
Interview Question Preparation **[Ideate]**



We search online for more information regarding the topic before preparation of the interview script. The interview script draft was shared with the team members via WhatsApp.

[5 November 2023]

Before-Interview Preparation **[Empathy]**



We communicated with the lecturer to confirm her availability in the interview session. We discussed the date, time, and venue to have an interview.

[5 November 2023]

Second Meeting with Teammates **[Define]**

We have a short conferencing session to discuss the responsibilities of each team member, and expectations of the interview.

[7 November 2023]

Interview with Expert **[Empathy]**

We conducted a face-to-face interview with Dr Zuriahati Mohd Yunos, a respected lecturer specialising in the field of AI. The interview took place at BK7, N28, Faculty of Computing.

[8 November 2023]

Documentation after Interview **[Define]**

We had meeting to discuss on the documentation tasks to identify and understand the main current problems and solutions in the field of AI conveyed by Dr Zuriahati.

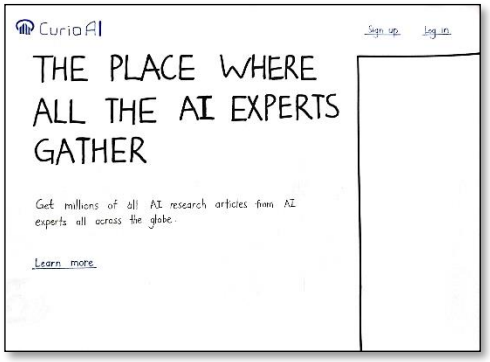
[13 November 2023]

Brainstorming and Prototyping **[Prototype]**

From the questions and answers exchanged during the interview, we recognised the concept, current problems, and its solutions. We applied the opinion conveyed by her and turned it into a prototype.

[15 November 2023]

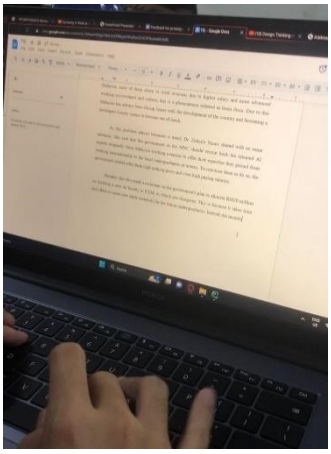
Prototype Model Testing **[Test]**

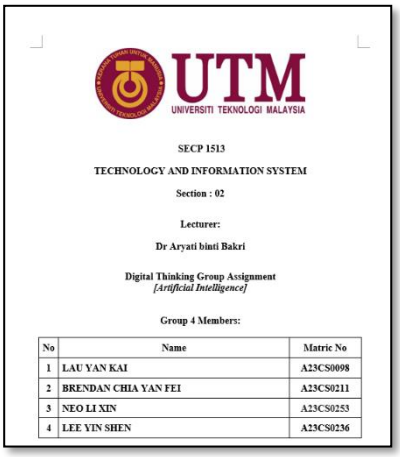


We evaluated the effectiveness and usability of the prototype. After first testing of prototype, we adjusted the prototype to enhance the overall efficiency.

[15 November 2023]

Preparation for Report Writing **[Define]**





UTM
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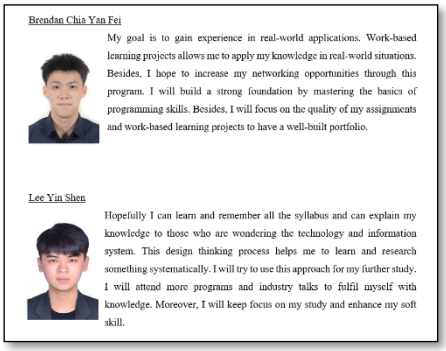
After interviewing and prototyping, we completed our formal writing report. This report serves as a formal reference for evidence of conductance of the group project.

[15 November 2023]

Reflection on the Project **[Define]**

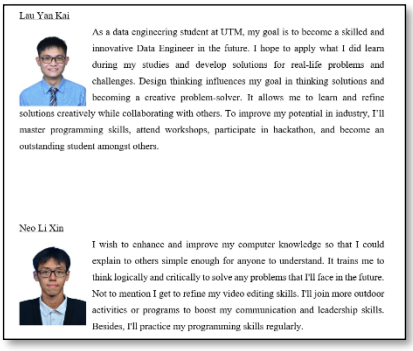


Brendan Chia Yan Fei

My goal is to gain experience in real-world applications. Work-based learning projects allows me to apply my knowledge in real-world situations. Besides, I hope to increase my networking opportunities through this program. I will build a strong foundation by mastering the basics of programming skills. Besides, I will focus on the quality of my assignments and work-based learning projects to have a well-built portfolio.

Lee Yin Shen

Hopefully I can learn and remember all the syllabus and can explain my knowledge to those who are wondering the technology and information system. This design thinking process helps me to learn and research something systematically. I will try to use this approach for my further study. I will attend more programs and industry talks to fulfil myself with knowledge. Moreover, I will keep focus on my study and enhance my soft skill.



Lau Yan Kai

As a data engineering student at UTM, my goal is to become a skilled and innovative Data Engineer in the future. I hope to apply what I did learn during my studies and develop solutions for real-life problems and challenges. Design thinking influences my goal in thinking solutions and becoming a creative problem-solver. It allows me to learn and refine solutions creatively while collaborating with others. To improve my potential in industry, I'll master programming skills, attend workshops, participate in hackathon, and become an outstanding student amongst others.

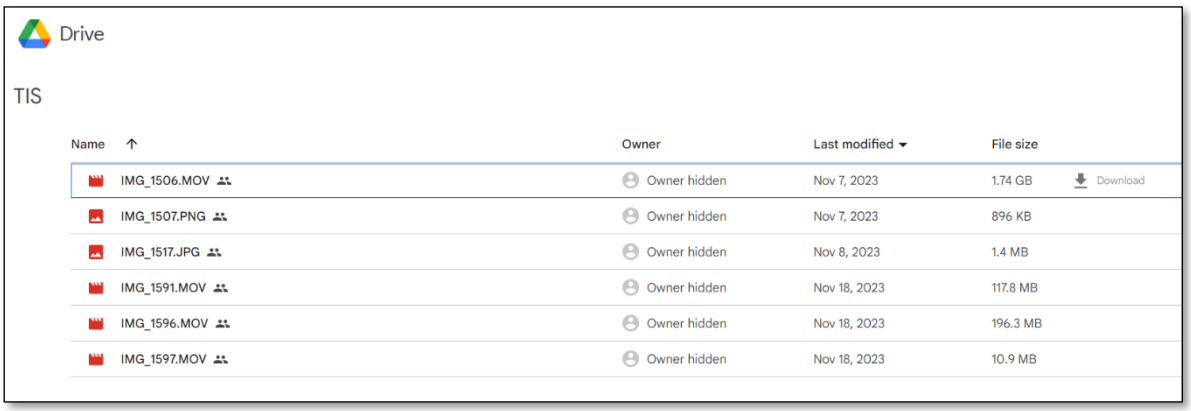
Neo Li Xin

I wish to enhance and improve my computer knowledge so that I could explain to others simple enough for anyone to understand. It trains me to think logically and critically to solve any problems that I'll face in the future. Not to mention I get to refine my video editing skills. I'll join more outdoor activities or programs to boost my communication and leadership skills. Besides, I'll practice my programming skills regularly.

We identified areas of improvement that can be implemented to improve ourselves in the industry.

[16 November 2023]

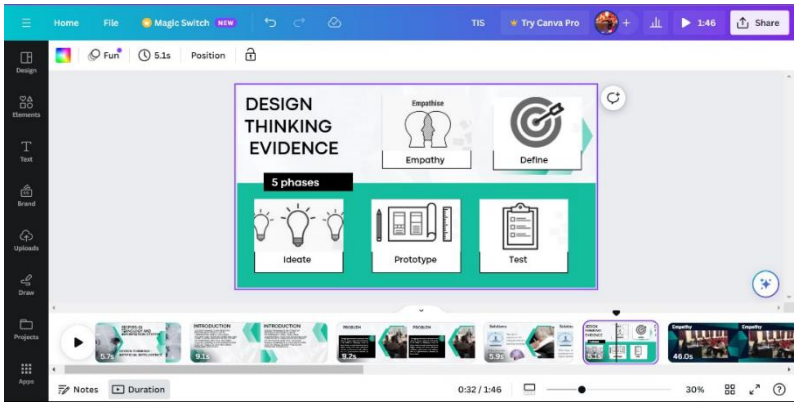
Preparation for Video Recording **[Ideate]**



Video recordings are checked and made sure that the video recordings captured meet the standards.

[17 November 2023]

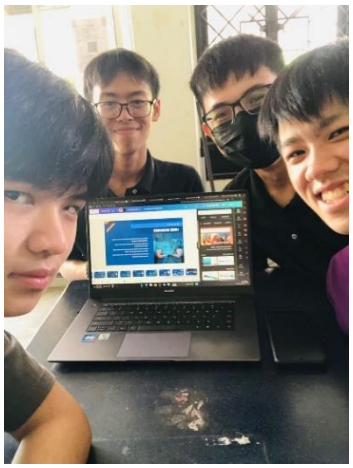
Video Editing **[Ideate]**



We edited the video recordings using Canva. The output video was in high definition and uploaded to YouTube.

[17 November 2023]

Project Finalisation **[Ideate]**



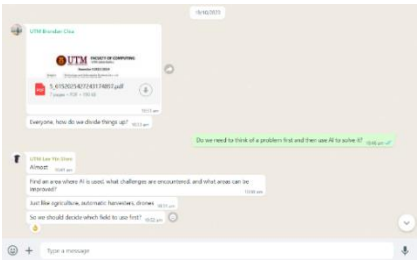
We reviewed our project again to ensure that the project aligns with the standards and requirements.

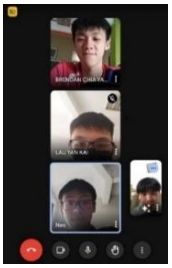
[322 words]

Design Thinking Phases

Empathy

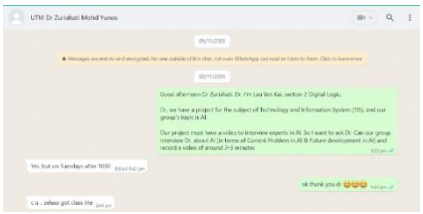
- **Discussion on our topic**





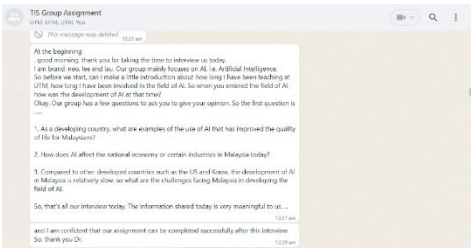
In our first meeting, we made a WhatsApp group for ongoing discussions and agreed on Artificial Intelligence (AI) as our main topic.

- **Preparation for interview with expert**



We contacted Dr Zuriahati Mohd Yunos, who has more than 15 publications related to the topic of AI with more than 75 citations. We confirmed their availability and schedule for an interview session. We hope to obtain valuable insights from her.

- **Preparation for interview question**



We have a discussion on finalising the interview questions. The finalised interview questions are:

1. Based on your experience, what are the challenging problems you have encountered in the field of AI?

2. Recently, Prime Minister Anwar announced an allocation of RM20 million to establish Malaysia's first AI faculty at UTM. Do you think how significant is this funding in shaping the future of AI in Malaysia, and what potential breakthroughs do you foresee in this context?

- **Interview with expert**

We conducted a face-to-face interview with Dr Zuriahati Mohd Yunos. The interview took place at BK7, N28, Faculty of Computing. Dr Zuriahati had shared us a lot of valuable insight of hers and the potential solutions to solve the current problem of AI in Malaysia.

[185 words]

Define

Malaysia, as a developing country, compared to other developed countries such as Japan, has encountered significant challenges in the field of AI. According to valuable insights from Dr Zuriahati, an experienced lecturer with more than 15 publications published related to the topic of AI at UTM, the greatest challenge in AI development in Malaysia is the lack of skilled professionals in the field. It is an unfortunate fact that although education was able to create talented individuals in AI field in Malaysia, most of them still chose to work abroad due to higher pay and more advanced working environment. The mentioned issue not only slower down the development progress of AI, but also brings tangible effects to the quality of life from all walks of life of the citizen of Malaysia.

[131 words]

Ideate

To overcome the challenge of shortage of AI experts, Malaysian government should implement approaches to recruit back the AI experts who currently working overseas. Malaysian government could pay competitive salary, giving great titles and posts, and establish attractive employment contract to those experts to overcome the issue of brain drain.

Besides, Malaysian government should also focus and improve the faculty of AI at Universiti Malaya (UM). Since UM already have faculty of AI, the government should focus on improving the faculty, instead of allocating another budget to establish another Faculty of AI in Universiti Teknologi Malaysia (UTM).

Also, we have come to an idea to build an online learning platform, initially as a website. The main objective of the platform is to collect articles, journal or research papers related to the topic of AI or Machine Learning (ML) by utilising an automated algorithm. We plan to have partnership with international AI experts from different regions. Additionally, we will also have Memorandum of Understanding (MoU) with local universities, to provide continuous knowledge and support to undergraduate and postgraduate students.

[178 words]

Prototype

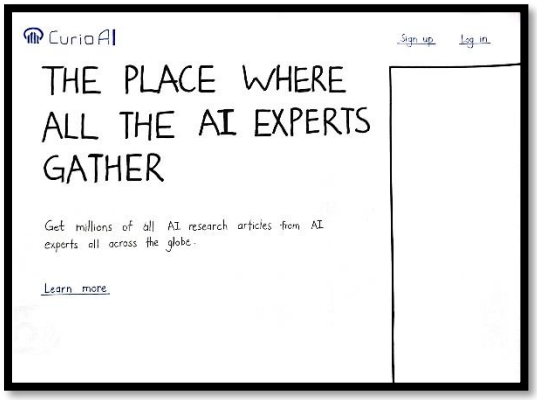
We have an idea to build an online learning platform. It will be an online learning platform dedicated to AI and ML. Its primary function is to automatically collect the articles, journal, and research papers related to these topics based on an advanced algorithm. The website is accessible to the public. Students and professionals who would like to have an in-depth insight into the realm of AI could access the website and obtain information from the website.

The platform serves as a hub that promotes continuous learning and knowledge exchange amongst the AI community. Through partnerships with international AI experts from various of regions, livestreaming sessions, the platform helps cultivate AI expert in our country by facilitating interactive learning experiences and advancing their understanding about AI and its applications.

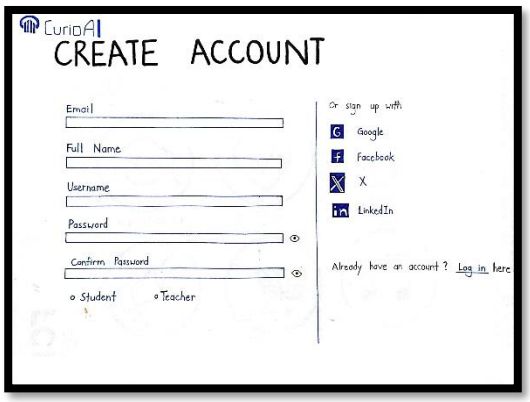
Through MoU with local universities, the platform extends its impact by collaborating with academic institutions. The collaboration with local universities helps provide continuous support and educational resources to undergraduate and postgraduate students who currently pursuing their studies in Computer Science. In such situations, our platform would help contribute to the growth and development of AI in our country.

[187 words]

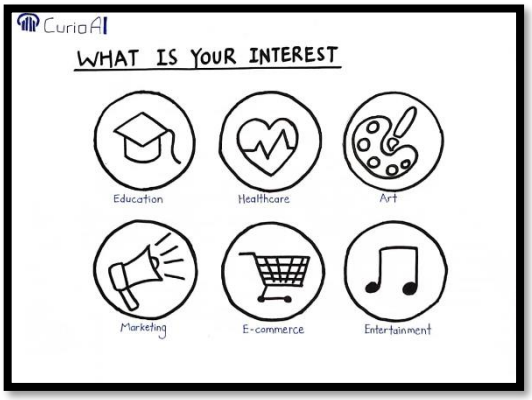
Prototype Testing



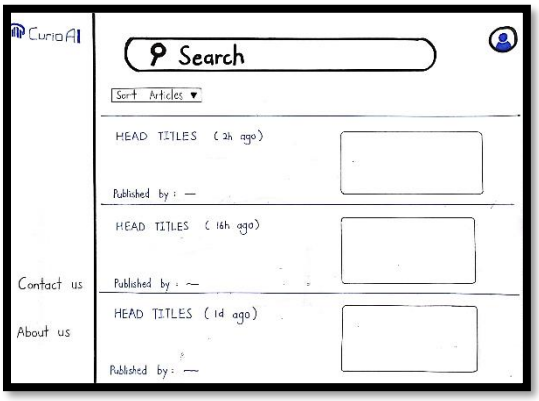
Main page of our website - CurioAI



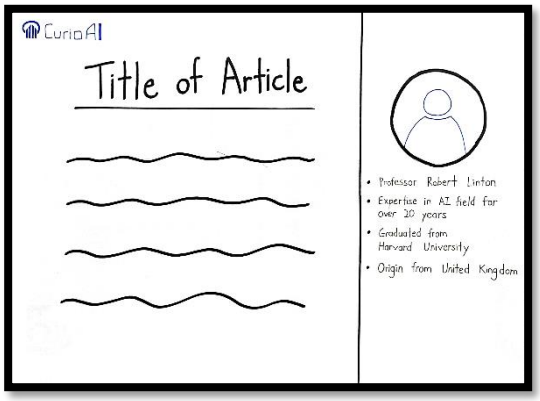
User could create account or sign in



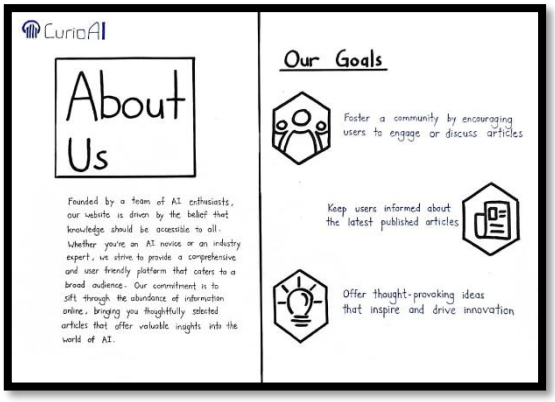
After creating account, user could choose their field of interests



The main page will be refreshed, and contents will be updated according to user's interests



When user select an article, it will show the bibliography of the author of the article at the right-hand side



User could select About Us to see our website history, goals, as well as contact number and email

[76 words]

Reflection

Brendan Chia Yan Fei

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[292 words]

[Total words: 1498 words]

Task Distribution

<table>
<tr><th colspan="2">Name</th><th>Lau Yan Kai</th><th>Neo Li Xin</th><th>Lee Yin Shen</th><th>Brendan Chia Yan Fei</th></tr>
<tr><td rowspan="8">Task</td><td rowspan="4">Interview and Documentation</td><td colspan="4">Selecting AI expert to be interview</td></tr>
<tr><td>Request permission from expert</td><td colspan="3">Video recording for evidence and record</td></tr>
<tr><td colspan="2">Interview question preparation</td><td></td></tr>
<tr><td colspan="4">Interview with expert</td></tr>
<tr><td colspan="4">Documentation after interview</td></tr>
<tr><td>Prototype</td><td>Prototype testing & finalisation</td><td>Producing prototype</td><td colspan="2">Video editing</td></tr>
<tr><td rowspan="4">Report Writing</td><td>Details description for each phase, Teamworking, Assessment point</td><td>Problem and Solution</td><td>Graphics and visual</td><td>Introduction</td></tr>
<tr><td colspan="4">Design thinking evidence</td></tr>
<tr><td colspan="4">Reflection</td></tr>
<tr><td colspan="4">Final review, finalisation</td></tr>
<tr><td colspan="4">Presentation</td></tr>
</table>

Project Demonstration - Video Demonstration

https://www.youtube.com/watch?v=qUu-xF2VHdU

Reference

Richa Sharma. (2023, October 20). 22 Impressive About Us Page Examples that you should see today. https://www.webdew.com/blog/about-us-page-examples

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