

TEAM MANAGEMENT REPORT

MCS08

Team Member:

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Part 1

Discussion of team management

After 12 weeks of working on a project as a team, we had encountered a lot of things that were worth our time as we gained a lot of new experiences during the process of working the project. Not to mention that our project has gone well in terms of fulfilling all the requirements given by our supervisor.

What went well

Our team had completed all the requirements because of coordinated team management from our team members. We have a leader that coordinates the tasks to team members through communication, motivation and positive work environment. Our team members were able to complete the tasks on the given deadline as well. Using a software project management app is also beneficial for our team as managing tasks and setting deadlines are easier and easier to refer to as well. To give an evaluation for each of our team members, firstly Yeoh Ming Wei had managed to allocate the task to team members and did his task on hosting the web application into Google Colab. Our next member, Yew Yee Perng had managed to perform well on his tasks on implementation of human face generation model into the application. Lastly, Toh Xi Heng had made a great contribution in creating a user interface for our application. Our team had also fulfilled the role as a product owner by maintaining continuous communication with our supervisor to collect more information for our projects.

Opportunities created

There were lots of opportunities created that benefited us in different aspects. Firstly, we were given an opportunity to increase our exposure to new libraries and AI models which we never had previously. For example, our team never had experiences with using Flask as our frontend thus we decided to proceed with it and it worked out fairly well to display all the details we expected when drawing it in Figma. We were also given in depth exposure on AI models, understanding how the models work, how it was produced and how we can integrate it with our UI.

Secondly, we were given an opportunity to work closely in a team. Throughout the weeks as a team, we spend time together to understand each other, and we progress and collaborate together. This is crucial as everyone is unique and everyone has their own way to tackle problems faced. Thus as a team, we are able to discuss and decide on an agreed way of working and to tackle all the issues we

face as a team. In short, we were able to improve our communication and collaboration skills as well as to understand team dynamics.

In addition, we were able to develop different skills as we progressed throughout the year. We were able to gain project management skills as working on a long-term project helps us to learn in terms of planning time management, task prioritisation and tracking progress. Furthermore, we also gained technical skills as we gained hands-on experience when creating a working prototype for our project. Last but not least, we were able to improve on our presentation skills and documentation skills as we often require to present and write reports. These skills help in conveying information to others.

Difficulties encountered

Throughout the project duration, There were several instances where we encountered difficulties and solved them swiftly. At the beginning of the project, we had a hard time understanding the topic as it was a project more towards research and the learning curve was steeper. Fortunately, we managed to grasp the knowledge within our planned time. Another recent moment where we encountered difficulties was to integrate the model with the UI, however it was also solved after thorough research on how the integration works.

Task allocation to members

Based on the team contribution, our team had managed to allocate the task fairly and perform their tasks diligently. During the development phase, we were able to split our tasks such as doing the frontend work which is UI, backend which is the integration of our human face generation and another which is quality testing. Each of these tasks had been delegated to each of the team members and agreed by our team members to ensure that no conflict would happen later. As a result, the tasks given were successfully completed by our team members and there is no issue encountered throughout the process of our project.

Reflection on team management success or difficulties

As our team uses hybrid project management, Scrumban which is the combination between Scrum and Kanban principles, we would say that our team actually follows project management well. All our members fulfilled the role of being a developer of the application and product owner to communicate with the supervisor. We also did a

weekly meeting with our supervisor to follow up with our project and gather feedback to improve our application. Besides that, we also used Kanban Board to keep track of the progress of our application such as what task we will be going to do, in progress, or done for our application.

There were also some difficulties experienced by our team on team management. There was an instance where our team had different opinions on the approach to improve the output of the model. The debate was getting intense and luckily we managed to solve it by voting and following the majority's choice of approach. Besides that, we had time management issues where we missed our deadlines by a few days as our task allocation was badly planned thus affecting our progress, causing the team to struggle to meet deadlines. Lastly, there was a case where we had poor communication or wrong interpretations on messages leading to inconsistent outputs and had to redo the wrong, which ended up spending more time than clarifying.

Part 2

Minutes of Meeting

TEAM MEETING AGENDA WEEK2

Date: 7th August 2024

Time: 10.00 am – 12.00 pm

Location: Room 2413

Meeting Objectives

- **Recap our project's objectives**
- **Decide our next project progression**

Agenda Items

- 1. Do recap**
 - **Get help from supervisor to have a recap for our project**
 - **Show supervisor our understanding about the project**
- 2. Discussion with supervisor for future work**
 - **What should we do for next**

TEAM MEETING MINUTES WEEK2

Date: 7th August 2024

Time: 10.00 am – 12.00 pm

Meeting Title: FYP First Weekly Meeting

Attendees

- Yeoh Ming Wei
- Toh Xi Heng
- Yew Yee Perng

Agenda

1. Do recap
2. Do discussion with supervisor
3. Get idea from supervisor's PhD student

Meeting Objectives

- Recap our project's objectives
- Decide our next project progression

Topics Discussed

1. Splitting the project work
 - Splitting 2 projects between 2 groups which is audio decomposition and human face generation
 - Our team will be doing human face generation
2. Software used

- Google Colab for a better GPU for better processing

3. What to do next

- How should we start our project

Action Items (Work Distribution after meeting)

1. Do research for video generation model

- Yeoh Ming Wei
- Toh Xi Heng
- Yew Yee Perng

Decisions Made

- Split work into music separation and video generation
- Use Google Colab for faster GPU
- Find model used in our project and discuss on next meeting

Work Contribution:

Name	Work Contribution
Yeoh Ming Wei	Writing first meeting agenda and meeting minutes
Toh Xi Heng	Writing first meeting agenda and meeting minutes
Yew Yee Perng	Writing first meeting agenda and meeting minutes

Next Meeting Date: 14th August 2024

TEAM MEETING AGENDA WEEK3

Date: 14th August 2024

Time: 10.00 am – 12.00 pm

Location: Room 6214

Meeting Objectives

- **Show our current progress to supervisor**
- **Decide our next progress**

Agenda Items

- 1. Show progress**
 - **Show model found to supervisor**
 - **Get feedback from supervisor**
- 2. Discussion with supervisor for future work**
 - **What should we do until the next meeting**

TEAM MEETING MINUTES WEEK3

Date: 14th August 2024

Time: 11.00 am – 12.00 pm

Meeting Title: FYP Second Weekly Meeting

Attendees

- Yeoh Ming Wei
- Toh Xi Heng
- Yew Yee Perng

Agenda

1. Show current progress to supervisor
2. Do discussion with supervisor
3. Get idea from supervisor's PhD student

Meeting Objectives

- Show our current progress done
- Decide our next progress

Topics Discussed

1. Show current progress done
 - Show the models we have found
 - MuseTalk, SadTalker, Video-Retalking
2. Decide which model use
3. Make sure which colab version we want to use

Action Items(Work Distribution after meeting)

- 1. Download and try code running in Colab**
 - Toh Xi Heng
 - Yeoh Ming Wei
 - Yew Yee Perng

- 2. Read the research paper of SadTalker**
 - Toh Xi Heng
 - Yeoh Ming Wei
 - Yew Yee Perng

- 3. Do a quick demo presentation to supervisor**
 - Toh Xi Heng
 - Yeoh Ming Wei
 - Yew Yee Perng

Decisions Made

- **Subscribe Colab Pro+**
- **Used SadTalker model as source code**

Work Contribution:

Name	Work Contribution
Yeoh Ming Wei	Find model SadTalker
Toh Xi Heng	Find model Video-Retalking
Yew Yee Perng	Find model MuseTalk

Next Meeting Date: 21th August 2024

TEAM MEETING AGENDA WEEK4

Date: 21th August 2024

Time: 10.00 am – 12.00 pm

Location: Room 6306

Meeting Objectives

- **Show our current progress done**
- **Decide our next progress**

Agenda Items

- 1. Show progress**
 - **Show our understanding of SadTalker to supervisor**
 - **Get feedback from supervisor**
- 2. Discussion with supervisor for future work**
 - **What should we do for next**

TEAM MEETING MINUTES WEEK4

Date: 14th August 2024

Time: 10.00 am – 12.00 pm

Meeting Title: FYP Third Weekly Meeting

Attendees

- Yeoh Ming Wei
- Toh Xi Heng
- Yew Yee Perng

Agenda

1. Show current progress to supervisor
2. Do discussion and get feedback from supervisor
3. Get idea from supervisor's PhD student

Meeting Objectives

- Show our current progress done
- Decide our next progress

Topics Discussed

1. Show current progress done
 - Do a quick demo for our known of pre-trained model in SadTalker
2. Get feedback from supervisor
 - More explanation for how those model actually work
3. How we can improve the generated video
 - Lip-Synchronisation, Video Quality, Facial Movement

Action Items(Work Distribution after meeting)

- 1. Find way to improve video quality**
 - Toh Xi Heng

- 2. Find way to improve lip-synchronisation**
 - Yew Yee Perng

- 3. Find way to improve facial emotion and movement**
 - Yeoh Ming Wei

Decisions Made

- Do research for three way improve generated video
- Compare to decide which pre-trained model we will use at next meeting

Work Contribution:

Name	Work Contribution
Yeoh Ming Wei	A slide presentation for pre-trained model 3DMM and FaceRender
Toh Xi Heng	A slide presentation for pre-trained model ExpNet
Yew Yee Perng	A slide presentation for pre-trained model PoseVAE

Next Meeting Date: 28th August 2024

TEAM MEETING AGENDA WEEK5

Date: 28th August 2024

Time: 10.00 am – 12.00 pm

Location: Room 2413

Meeting Objectives

- **Show our current progress done**
- **Decide our next progress**

Agenda Items

- 1. Show progress**
 - **Show our findings of three ways video improvement to supervisor**
 - **Get feedback from supervisor**
- 2. Discussion with supervisor for future work**
 - **What should we do for next**

TEAM MEETING MINUTES WEEK5

Date: 28th August 2024

Time: 10.00 am – 12.00 pm

Meeting Title: FYP Fourth Weekly Meeting

Attendees

- Yeoh Ming Wei
- Toh Xi Heng
- Yew Yee Perng

Agenda

1. Show current progress to supervisor
2. Do discussion and get feedback from supervisor
3. Get idea from supervisor's PhD student

Meeting Objectives

- Show our current progress done
- Decide our next progress

Topics Discussed

1. Show current progress done
 - Do a quick demo for three different pre-trained models
2. Decide how to improve the model
3. How we can improve the video quality

Action Items(Work Distribution after meeting)

- 1. Find way to improve video quality**
 - Toh Xi Heng
 - Yew Yee Perng
 - Yeoh Ming Wei

Decisions Made

- Decide to improve video quality
- Find way to improve video quality

Work Contribution:

Name	Work Contribution
Yeoh Ming Wei	Find out way for improving video quality
Toh Xi Heng	Find out way for improving video quality
Yew Yee Perng	Find out way for improving video quality

Next Meeting Date: 4th September 2024

TEAM MEETING AGENDA WEEK6

Date: 4th September 2024

Time: 10.00 am – 12.00 pm

Location: Room 6215

Meeting Objectives

- **Show our current progress done**
- **Decide our next progress**

Agenda Items

- 3. Show progress**
 - **Show our finding of video quality improvement to supervisor**
 - **Get feedback from supervisor**
- 4. Discussion with supervisor for future work**
 - **What should we do for next**

TEAM MEETING MINUTES WEEK6

Date: 4th September 2024

Time: 10.00 am – 12.00 pm

Meeting Title: FYP fifth Weekly Meeting

Attendees

- Yeoh Ming Wei
- Toh Xi Heng
- Yew Yee Perng

Agenda

1. Show current progress to supervisor
2. Do discussion and get feedback from supervisor
3. Get idea from supervisor's PhD student

Meeting Objectives

- Show our current progress done
- Decide our next progress

Topics Discussed

1. Show current progress done
 - Show the way we found to supervisor
 - Upscaling and Frame Rate Adjust
2. Supervisor given idea
 - Can see video as run through frames
 - So can do raster to vector image to improve
3. Decide which way we used

Action Items(Work Distribution after meeting)

- 1. Find way to convert raster to vector image**
 - Toh Xi Heng
 - Yew Yee Perng

- 2. Find way to capture video frames**
 - Yeoh Ming Wei

Decisions Made

- Decide to do raster to vector
- Find way to improve based on the above decision

Work Contribution:

Name	Work Contribution
Yeoh Ming Wei	Find out way for improving video quality
Toh Xi Heng	Find out way for improving video quality
Yew Yee Perng	Find out way for improving video quality

Next Meeting Date: 11th September 2024

TEAM MEETING AGENDA WEEK7

Date: 11th September 2024

Time: 10.00 am – 12.00 pm

Location: Room 6215

Meeting Objectives

- **Show our current progress done**
- **Decide our next progress**

Agenda Items

- 1. Show progress**
 - **Show the way we found**
 - **Get feedback from supervisor**
- 2. Discussion with supervisor for future work**
 - **What should we do for next**

TEAM MEETING MINUTES WEEK7

Date: 11th September 2024

Time: 10.00 am – 12.00 pm

Meeting Title: FYP sixth Weekly Meeting

Attendees

- Yeoh Ming Wei
- Toh Xi Heng
- Yew Yee Perng

Agenda

1. Show current progress to supervisor
2. Do discussion and get feedback from supervisor
3. Get idea from supervisor's PhD student

Meeting Objectives

- Show our current progress done
- Decide our next progress

Topics Discussed

1. Show current progress done
 - Show the way we found to supervisor
2. Supervisor given idea
 - Get the paper and code for raster to vector image from supervisor
 - Get the paper and code for frames capturing from PhD student

Action Items(Work Distribution after meeting)

- 1. Do our own code to make frames capturing**
 - Toh Xi Heng
- 2. Read the paper given**
 - Toh Xi Heng
 - Yeoh Ming Wei
 - Yew Yee Perng
- 3. Download and try running with the code given**
 - Yeoh Ming Wei
 - Yew Yee Perng

Decisions Made

- As the code given is complicated, we decided to find code for frames capturing ourselves
- Use the code given by supervisor

Work Contribution:

Name	Work Contribution
Yeoh Ming Wei	Find way to do frames capturing
Toh Xi Heng	Find way to convert raster to vector image
Yew Yee Perng	Find way to convert raster to vector image

Next Meeting Date: 18th September 2024

TEAM MEETING AGENDA WEEK8

Date: 18th September 2024

Time: 10.00 am – 12.00 pm

Location: Room 2413

Meeting Objectives

- **Show our current progress done**
- **Decide our next progress**

Agenda Items

1. **Show progress**
 - **Asking problem**
 - **Get feedback from supervisor**

TEAM MEETING MINUTES WEEK8

Date: 18th September 2024

Time: 10.00 am – 12.00 pm

Meeting Title: FYP seventh Weekly Meeting

Attendees

- Yeoh Ming Wei
- Toh Xi Heng
- Yew Yee Perng

Agenda

1. Show current progress to supervisor
2. Do discussion and get feedback from supervisor

Meeting Objectives

- Show our current progress done
- Decide our next progress

Topics Discussed

1. Asking problem
 - Facing problem with raster to vector code
 - Ask supervisor for advice

Action Items(Work Distribution after meeting)

- 1. Implement the UI to make it usable**
 - Toh Xi Heng
- 2. Link the UI with colab**
 - Yeoh Ming Wei
- 3. Make code able to run those pre-trained models in our application**
 - Yew Yee Perng

Decisions Made

- Start implementing the web application

Work Contribution:

Name	Work Contribution
Yeoh Ming Wei	Link UI with Google Colab
Toh Xi Heng	Implement the UI
Yew Yee Perng	Integrate pre-trained models into application

Next Meeting Date: 2nd October 2024

TEAM MEETING AGENDA

WEEK10

Date: 2nd October 2024

Time: 10.00 am – 12.00 pm

Location: Room 6215

Meeting Objectives

- **Show our current progress done**

Agenda Items

- 1. Show progress**
 - **showing supervisor our web application**

TEAM MEETING MINUTES

WEEK10

Date: 2nd October 2024

Time: 10.00 am – 12.00 pm

Meeting Title: FYP eighth Weekly Meeting

Attendees

- **Yeoh Ming Wei**
- **Toh Xi Heng**
- **Yew Yee Perng**

Agenda

- 1. Show current progress to supervisor**
- 2. Do discussion and get feedback from supervisor**

Meeting Objectives

- **Show our current progress done**
- **Decide our next progress**

Topics Discussed

- 1. Showing progress**
 - **Show our UI to supervisor**

Action Items(Work Distribution after meeting)

- 1. Perform testing for our application through friends**
 - Toh Xi Heng
 - Yeoh Ming Wei
 - Yew Yee Perng

Decisions Made

- UI had been completed, perform testing with different users

Work Contribution:

Name	Work Contribution
Yeoh Ming Wei	Use Flask to make UI runnable in colab
Toh Xi Heng	Implement the UI design
Yew Yee Perng	Make the code UI can automatically run those pretrained model

Next Meeting Date: 9th October 2024

TEAM MEETING AGENDA WEEK11

Date: 9th October 2024

Time: 10.00 am – 12.00 pm

Location: Room 6214

Meeting Objectives

- **Decide the testing cases needed in test report**

Agenda Items

- 1. Discuss on test report**
- 2. Decide the test needed**

TEAM MEETING MINUTES WEEK11

Date: 9th September 2024

Time: 10.00 am – 12.00 pm

Meeting Title: FYP ninth Weekly Meeting

Attendees

- Yeoh Ming Wei
- Toh Xi Heng
- Yew Yee Perng

Agenda

1. Discuss on test report
2. Decide the test needed

Meeting Objectives

- Decide the testing cases needed in test report

Topics Discussed

1. Consider Testing needed
 - Black box, white box, usability and integration testing
2. User guide
 - Run through the code again to make sure the whole process

Action Items(Work Distribution after meeting)

1. White box testing
 - Yeoh Ming Wei
2. Black box testing
 - Yew Yee Perng
3. Usability testing
 - Toh Xi Heng
4. Integration testing
 - Toh Xi Heng
5. Combination of test report
 - Toh Xi Heng
 - Yeoh Ming Wei
 - Yew Yee Perng
6. User guide
 - Yeoh Ming Wei
 - Yew Yee Perng
7. Slide for last presentation
 - Toh Xi Heng
 - Yeoh Ming Wei
 - Yew Yee Perng

Decisions Made

- UI done so let other to try the application

Work Contribution:

Name	Work Contribution
Yeoh Ming Wei	Let friends to try the application
Toh Xi Heng	Let friends to try the application
Yew Yee Perng	Let friends to try the application

Next Meeting Date: 15 October 2024

TEAM MEETING AGENDA

WEEK12

Date: 15th October 2024

Time: 3.00 pm – 4.00 pm

Location: Supervisor Office

Meeting Objectives

- **Conduct trial demonstrations for our projects to supervisors**

Agenda Items

- 1. Do presentation**
- 2. Get feedback from supervisor**

TEAM MEETING MINUTES

WEEK12

Date: 15th September 2024

Time: 3.00 pm – 4.00 pm

Meeting Title: FYP Last Weekly Meeting

Attendees

- Yeoh Ming Wei
- Toh Xi Heng
- Yew Yee Perng

Agenda

1. Do presentation
2. Get feedback from supervisor

Meeting Objectives

- Conduct trial demonstrations for our projects to supervisors

Topics Discussed

1. Do a presentation for supervisor
2. Supervisor given idea can include
 - No need to explain the model completely again

Action Items(Work Distribution after meeting)

- 1. Prepare for presentation**

Work Contribution:

Name	Work Contribution
Yeoh Ming Wei	<ol style="list-style-type: none">1. Done white box testing2. Done the User Guide3. Done the test report combination4. Done presentation slide
Toh Xi Heng	<ol style="list-style-type: none">1. Done Integration testing2. Done the Usability testing3. Done the test report combination4. Done presentation slide
Yew Yee Perng	<ol style="list-style-type: none">1. Done black box testing2. Done the User Guide3. Done the test report combination4. Done presentation slide