

CE903/913 (MSc Group Project): Template for Minutes of Group Meetings

(all text boxes will automatically re-size, according to the amount of text entered)

Date & time of meeting:	January 26, 2023, 15:30 to 17:00
Place of meeting:	Silberrad Centre, Reading Room
Group members present:	Ahmed Ali Samuel Jularbel Shikhar Sharma Isreal Ufumaka Abdul Wahid Zan Yuan Mohammed M Rob Adetunji A Adedeji Ashu Berwal Dharsigan Bharathidasan Priteshkumar H K Thakkar
Group members absent but who explained their absence before the meeting (list given reason(s) for absence against each name):	None
All other group members (that is, those not listed in the previous two boxes):	None
Name of chairperson for <u>this</u> meeting:	Ahmed Ali
Name of secretary for <u>this</u> meeting:	Shikhar Sharma

New matters discussed:

This meeting was our first actual meeting, the main agenda of this meeting was to divide the work among the team members and to decide which datasets and models we should use for training and generating synthetic data.

We started off with a general introduction about our project so that every team member is on the same page. We discussed two research papers referred to us by the project supervisor, which are:

- 🕒 [MIMIC-IV, a freely accessible electronic health record dataset](#)
- 🕒 [The Health Gym: synthetic health-related datasets for the development of reinforcement learning algorithms](#)

The first research paper is about a dataset and the second is about generating synthetic data using a real dataset.

Digging further into the generation of synthetic data, we had a discussion about **Generative Adversarial Networks (GANs)**. A few team members agreed to use GANs and others suggested going for other Neural Network Models, this we shall decide after our meeting with the supervisor.

One other thing we discussed was the dataset we are going to use. We can use the **MIMIC-IV** dataset and the team also came up with some other datasets on their own. One of the team members found a very useful data source which is a data archive of the University of California Irvine. This archive contains 147 datasets (<https://archive.ics.uci.edu/ml/datasets.php?format=&task=&att=&area=life&numAtt=&numIns=&type=&sort=nameUp&view=table>)

Then we figured out which team member is going to work on which part of the upcoming **Requirements Specification Assignment**. Below is the division of work,

Introduction & Conclusion: Isreal Ufumaka, Shikhar Sharma

Requirement Analysis and Specification Team: Ahmed Ali, Shikhar Sharma, Priteshkumar H K Thakkar, Abdul Wahid

Substitutes:
Isreal Ufumaka, Deji,
Dharsigan Bharathidasan

Testing Schedule: Deji, Abdul Wahi, Zan Yuan **Substitutes:** Samuel Jularbel

Project Planning: Deji, Samuel Jularbel, Dharsigan Bharathidasan
Substitutes: Zan Yuan, Ahmed Ali

Issues/problems to be reported to project supervisor: Dataset, Model, Testing Schedule.

Record here the agreed chairperson, secretary, date, time and place of next formal meeting:

Place: Silberrad Centre, Reading Room

Date: January 26 , 2023

Time: 15:30 to 17:00

Chairperson: Ashu Berwal

Secretary: Dharsigan Bharathidasan

CE903/913 (MSc Group Project): Template for Minutes of Group Meetings

(all text boxes will automatically re-size, according to the amount of text entered)

Date & time of meeting: February 02, 2023, 15:30 to 16:30

Place of meeting: Silberrad Centre, Reading Room

Group members present:

Dharsigan Bharathidasan
Samuel Jularbal
Ashu Berwal
Ahmed Ali
Shikhar Sharma
Isreal Ufumaka
Zan Yuan
Mohammed M Rob
Adetunji A Adedeji
Priteshkumar H K Thakkar

Group members absent but who explained their absence before the meeting (list given reason(s) for absence against each name):

None

All other group members (that is, those not listed in the previous two boxes):

None

Name of chairperson for this meeting:

Ashu Berwal

Name of secretary for this meeting:

Dharsigan Bharathidasan

New matters discussed:

- We confirmed the dataset (Diabetic_data). There are more than 1 lakh rows and 50 columns. The target of the dataset is whether the person is diabetic or not.
- We compared 2 different models to create synthetic data: SMOTE and GAN
- We choose GAN as better option.
- In GAN we are going to use 2 neural networks models: generator and distributor
- A person from the group will merge the individual code and file.

Record here the agreed chairperson, secretary, date, time and place of next formal meeting:

Place: Silberrad Centre, Reading Room

Date: February 09, 2023

Time: 15:30 to 17:00

Chairperson: Samuel Jularbal

Secretary: Dharsigan Bharathidasan

CE903/913 (MSc Group Project): Template for Minutes of Group Meetings

(all text boxes will automatically re-size, according to the amount of text entered)

Date & time of meeting: 9/02/2023

Place of meeting: Zoom

Group members present: All but Israel

Group members absent but who explained their absence before the meeting (list given reason(s) for absence against each name): Israel had work during the time of the meeting.

All other group members (that is, those not listed in the previous two boxes):

Name of chairperson for this meeting: Samuel Jularbal

Name of secretary for this meeting: Adetunji Adedeji

Are the minutes of the previous meeting agreed as a correct record (after correction of matters of fact)?

List any corrections of matters of fact here: Correcting previous chair person.

Review all actions agreed at previous meeting and record how far individual responsibilities have been fulfilled. All parts of the previous submission were completed on time, individual responsibilities were completed within good time for the editor to thoroughly go through the submission.

Where individual responsibilities have not yet been fulfilled within the agreed timescale, list (for each responsibility) the reasons given:

Some responsibilities that did falter were sections where there was some confusion on how to handle the topic and the work that would contribute to it. Overall this was corrected in time for the submission but did cause

New matters discussed:

Issues/problems to be reported to project supervisor:

List all actions requiring attention (i.e., those uncompleted actions from the previous meeting and all actions agreed at the present meeting), the agreed timescale for completion of each one and who is responsible for each one (including setting an agenda for the next meeting and writing the minutes of the present meeting).

Uncompleted actions from the previous meeting should be the first on this list:

1. Each person will develop their own GANs model and bring it to the next weekly meeting to compare. We hope this will mean each person will have a decent understanding of GANs and how it works in principle.

Record here the agreed chairperson, secretary, date, time and place of next formal meeting:

Chairperson: Abdul

Secretary: Yuan Z

CE903/913 (MSc Group Project): Template for Minutes of Group Meetings

(all text boxes will automatically re-size, according to the amount of text entered)

Date & time of meeting: February 20, 2023, 15:30 to 16:30

Place of meeting: Silberrad Centre, Reading Room

Group members present:

Dharsigan Bharathidasan
Isreal Ufumaka
Ashu Berwal
Ahmed Ali
Shikhar Sharma
Zan Yuan
Mohammed M Rob
Adetunji A Adedeji
Priteshkumar H K Thakkar
Jalarbal Samuel J

Group members absent but who explained their absence before the meeting (list given reason(s) for absence against each name):

None

All other group members (that is, those not listed in the previous two boxes):

None

Name of chairperson for this meeting:

Isreal Ufumaka

Name of secretary for this meeting:

Dharsigan Bharathidasan

New matters discussed:

- Everyone shared their thoughts on choosing the dataset either tabular or image datasets.
- Based on the proof of concept we decided to work on the tabular data.
- Project supervisor attended this meeting, she had a discussion regarding the progress of the project and enquired whether we have any issues within the group. She clarified the doubts group members had.
- She asked GANs team to come up with the base model before week meeting and the EDA team to have better understanding of the datasets.
- EDA team is asked to handle the categorical data on the chosen dataset.

Record here the agreed chairperson, secretary, date, time and place of next formal meeting:

Chairperson: Priteshkumar H K Thakkar

Secretary: Jalarbal Samuel J

Date: 27/02/2023

Time: 3pm

Mode: Online

CE903/913 (MSc Group Project): Template for Minutes of Group Meetings

(all text boxes will automatically re-size, according to the amount of text entered)

Date & time of meeting:

March 06, 2023, 13:00 to 14:00

Place of meeting:

Online (Google Meet)

Group members present:

Dharsigan Bharathidasan
Samuel Jularbel
Abdul Wahid
Isreal Ufumaka
Ashu Berwal
Ahmed Ali
Shikhar Sharma
Zan Yuan
Adetunji A Adedeji
Priteshkumar H K Thakkar

Name of chairperson for this meeting:

Priteshkumar H K Thakkar

Name of secretary for this meeting:

Samuel Jularbel

New matters discussed:

- Discussed about the last meeting with the supervisor.
- We are going to use our own GANs model not the pre-build CTGAN.
- GANs team explained the model.
- We are going to apply MIMIC-3 and UCI heart disease dataset in our model.
- EDA team is asked to pre-process the MIMIC-3 dataset
(<https://physionet.org/content/mimiciii-demo/1.4/>).
- Planning to complete the GANs part by this week and to start the project report.
- Individual tasks for the documentation will be allocated by this week.

Record here the agreed chairperson, secretary, date, time and place of next formal meeting:

Day: Friday

Date: 10/03/2023

Time: 15:00 – 16:00

CE903/913 (MSc Group Project): Template for Minutes of Group Meetings

(all text boxes will automatically re-size, according to the amount of text entered)

Date & time of meeting: March 09, 2023, 15:30 to 16:00

Place of meeting: Online (Google Meet)

Group members present:

Dharsigan Bharathidasan
Samuel Jularbel
Abdul Wahid
Isreal Ufumaka
Ashu Berwal
Ahmed Ali
Shikhar Sharma
Zan Yuan
Adetunji A Adedeji
Priteshkumar H K Thakkar

Name of chairperson for this meeting: Dharsigan Bharathidasan

Name of secretary for this meeting: Ahmed Ali

New matters discussed:

- We have planned to create GUI for our model.
- Ahmed will work on creating the GUI.
- Dharsigan and Pritesh will work on writing the project report.
- Discussed about the Classification task and Isreal will work on this.
- As per the supervisor's suggestion we are going to implement Wasserstein Distance and kullback-Leibler Divergence Test.
- Abdul will work on testing part.
- Dharsigan and Ahmed Ali are going to meet the supervisor this week.

Record here the agreed chairperson, secretary, date, time and place of next formal meeting:

Chairperson: Ahmed Ali

Secretary: Abdul Wahid

Day: Monday

Date: 13/03/2023

Time: 15:00 – 16:00