Team Contributions: Rev 0
CXR

Team 27, Neuralyzers
Ayman Akhras
Nathan Luong
Patrick Zhou
Kelly Deng
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This document summarizes the contributions of each team member for the Rev 0 Demo. The time period of interest is the time between the POC demo and the Rev 0 demo.

1 Demo Plans

1.1 Chest X ray interface, including pretrained model

- Demonstrate the dashboard and how our application targets medical doctors.
- Demonstrate doctor profiles and how they can view their patients.
- Demonstrate the patient priority feature and how it can be used to prioritize patients.
- Demonstrate our medical record view and list view features, and how they are unique for each user.
- Demonstrate the ability to view the uploaded chest X-ray image and the generated report.
- Demonstrate the ability to upload a chest X-ray image for a patient and create a medical report.
- Explain how our model supports both object storage (blob storage) and MongoDB.
- Discuss OpenAI's role in report generation, mentioning how we have a decoupled system and can easily switch to a different model.

1.2 Detection Transformer Model (DETR) for Localized Disease Detection and Progression

- Describe the general structure of the machine learning model.
- Demonstrate the DETR model and how it works, showing how the predicted bounding boxes are close to the ground truth.
- Demonstrate the AUC and ROC curves for the model and explain their significance.

1.3 Future Plans for Rev1

- Integrate the DETR model with the rest of the application.
- Discuss future plans for continuous deployment (CD).

2 Team Meeting Attendance

Student	**Meetings**
Total	10
Ayman Akhras	6
Nathan Luong	8
Patrick Zhou	8
Kelly Deng	7
Reza Jodeiri	8

All students had their own difficult problems to solve. People with higher meeting counts tended to meet with each other more often.

3 Supervisor/Stakeholder Meeting Attendance

Student	**Meetings**
Total	3
Ayman Akhras	3
Nathan Luong	3
Patrick Zhou	3
Kelly Deng	3
Reza Jodeiri	3

4 Lecture Attendance

Student	Lectures
Total	13
Ayman Akhras	8
Nathan Luong	12
Patrick Zhou	10
Kelly Deng	7
Reza Jodeiri	10

5 TA Document Discussion Attendance

Student	Discussions
Total	24
Ayman Akhras	11
Nathan Luong	7
Patrick Zhou	6
Kelly Deng	6
Reza Jodeiri	10

This includes the meetings wiht the TA to dicuss preivous document such as problem statemnt, SRS, and etc. For the purpose of this report, any form of communication with the TA, including both formal meetings and informal messaging, is considered a "meeting." This includes questions asked and answered via email, messaging platforms, or any other medium of communication. The following table summarizes the number of such communications for each team member over the time period of interest.

6 Commits

Student	Commits	Percent
Total	327	100%
Ayman Akhras	59	18.04%
Nathan Luong	53	16.21%
Patrick Zhou	24	7.34%
Kelly Deng	45	13.76%
Reza Jodeiri	146	44.65%

7 Issue Tracker

Student	Authored (O+C)	Assigned (C only)
Team	26	12

Issues are team wide and are not assigned to a specific team member. The team has authored 26 issues and 12 of those issues have been closed.

8 CICD

Our CI/CD pipeline ensures our project's code quality and automates essential processes like testing and deployment. It begins with setting up the environment, where the latest code is checked out from our repository, Python is configured, and dependencies are installed while utilizing cached pip packages for efficiency. Next, the pipeline performs linting and type checks using tools such as flake8 and mypy to maintain code consistency and catch potential issues early. Finally, it runs unit and integration tests using a framework like pytest or unittest to verify that changes do not break existing functionality. This automated workflow is triggered whenever code is pushed or merged, streamlining our development process, reducing human errors, and ensuring a stable and reliable codebase.