# Feedback | Group 1

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### Milestone 1 Tasks

- 1. Problem Definition (you can learn more about it here)
- 2. Finalizing roles here
- 3. Schedule a call/meeting with me and Garo
- 4. Create a product roadmap and prioritized functionality (items)
- 5. Create a GitHub repository including readme.md and .gitignore (for Python) files
- 6. Create a virtual environment in the above repo and generate requirements.txt (ensure venv is ignored in git)
  - Create venv: python -m venv venv
  - Activate: source venv/bin/activate
  - Install: fastapi
  - Create requirements.txt: pip freeze > requirements.txt
  - Deactivate: deactivate
- 7. Push Problem Definition, GitHub repo setup (readme.md and .gitignore), requirements.txt
- 8. Prototype the UI using Figma or another similar tool
- 9. Create a private Slack channel in our Workspace and name it Group {number}
- 10. Install VS Code (also install the Project Manager extension)

### Milestone 1 Feedback

#### Problem Definition | 10 points

The problem is defined correctly, and the structure is kept.

- Broad Area of Interest
- · Preliminary Research
  - Current trends
  - o Opportunities
- Solution with Methodology
  - Data Collection
  - Analytical Techniques
  - o Implementation Plan
- Expected Outcomes
- Evaluation Metrics

Grade: 10/10

#### Roadmap | 10 points

The roadmap seems realistic

Grade: 10/10

UI | 10 Points

#### Perfect!

Grade: 5/10

#### Administrative Tasks | 5 points

- Roles are assigned
- · Preliminary discussion with me was done
- · Slack channel is created
- Github Repo is created

Grade: 5/5

#### Technical Tasks | 5 points

- Proper <u>gitignore</u> file is available for Python
- The Requirments.txt file is available with pre-installed packages, indicating that venv was created

Grade: 5/5

Grade

Final Grade: 40/40

# Milestone 2 | Tasks

# Product and Project Manager | 20 points

- 1. Install mkdocs package to start with the documentation (PSS will be available)
- 2. Database schema: Provide your product database structure (ERD)
- 3. Transform your project file structure according to the below tree.
- 4. check all the bellow activities from your team and merge everything

```
☐ service2/ # pgadmin
☐ .py files # if needed
☐ Dockerfile # if needed
☐ service3/ # etl related
☐ .py files
☐ requirments.txt
☐ Dockerfile # if needed
☐ example.ipynb # showing how it works
☐ docs/ #this folder we need for documentation
☐ .gitignore
☐ README.md
☐ LICENSE
```

### Data Scientist and Data Analyst | 20 points

- 1. Create a new git branch and name it ds
- 2. Simulate the data if you need
- 3. Try to use the CRUD functionality done by DB Developer
- 4. Work on modeling part using simple models, conduct extra research
- 5. Push your works to respective branch
- 6. Create pull request for the Product Manager

### Database Developer | 30 points

- 1. Create a new git branch and name it db
- 2. Create a DB and respective tables suggested by the Product Manager
- 3. Connect to SQL with Python
- 4. Push data from flat files to DB
- 5. Add extra methods that you might need throughout the project
- 6. Push your works to respective branch
- 7. Create pull request for the Product Manager

### API Developer | 30 points

- 1. Create a new git branch and name it back
- 2. Create a new service and name it back
- 3. Communicate with the DB Developer and PM in order to design the API
- 4. You can create dummy endpoints in the beginning (PSS will be available)
- 5. The following endpoints must be available:
  - 1. GET
  - 2. POST
  - 3. PUT
  - 4. DELETE
- 6. Push your works to respective branch
- 7. Create pull request for the Product Manager

## Front End Developer | 20

- 1. Create a new git branch and name it front
- 2. Create a container/service and name it front
- 3. Communicate with the PM in order to create the skeleton of the website.
- 4. Push your works to respective branch
- 5. Create pull request for the Product Manager

# Milestone 2 | Feedback

### Product and Project Manager | 20 Points

- 1. MkDocs is installed, and dummy documentation is present.
- 2. The file structure is **mostly correct**. Simply move all the services into a dedicated folder to keep them isolated from other files.
- 3. The ERD seems **mostly correct**; however, the results table where the **p-values** should be stored is missing.
- 4. Consider changing the database name to something more meaningful.
- 5. Merging has been done properly.

Grade: 15/20

### Database Developer | 30 Points

From a database development perspective, everything has been done properly.

Grade: 30/30

# Data Scientist and Data Analyst | 20 Points

Good job! However, I couldn't find any A/B testing-related elements, either from a modeling/testing or visualization perspective.

It was expected to connect to the DB directly.

Grade: 10/20

## API Developer | 30 Points

From an API development perspective, everything has been done properly.

Grade: 30/30

## Front End Developer | 20 Points

The skeleton of the website was not created. The skeleton refers to constructing the planned design as outlined on Figma.

Grade: 10/20

Final Grade: 95/120

# Milestone 3 | Tasks

### Product and Project Manager | 40 Points

- 1. From the previous milestone, you must have:
  - Refactored the project file structure with services isolated.
  - Updated the ERD diagram to include the missing results table.
  - o Applied a new database name across the project.
- 2. Design all the endpoints required and share them with the Backend and Frontend teams:
  - Ensure the endpoints cover the functionality needed for the web application to work.
- 3. Support the Frontend Engineer in finalizing the UI (no need to connect with FastAPI within this milestone; this will be done in Milestone 4):
  - Research Streamlit components/elements.
  - Suggest appropriate elements.

Note: No need to reinvent the wheel—stick with built-in Streamlit functionality.

# Database Developer | 10 Points

- 1. Update the database tables based on the new ERD from the previous milestone.
- 2. Finalize the documentation using proper docstrings.
- 3. Push the final output to the respective **branch**.

# Data Scientist | 20 Points

- 1. Build the final model.
- 2. Prepare the final output.
- 3. Push the final output to the respective **branch**.

## API Developer | 30 Points

- 1. Create **all** the required endpoints (coordinate with the Product Manager).
- 2. Create schemas using Pydantic:
  - Response Models: Define the structure of the return values.
  - **Documentation**: Add docstrings to all your endpoints.
- 3. Push the final output to the respective **branch**.

# Frontend Developer | 20 Points

1. Build the final layouts of the app.

- 2. Communicate with the Product Manager for requirements.
- 3. Use Streamlit's built-in elements/components.
- 4. No need to connect with the endpoints; this will be required for the final version.
- 5. Push the final output to the respective **branch**.