



UNIVERSITI
MALAYA

FOP ASSIGNMENT: MANAGERIAL REPORT

NAME	MATRIX NUMBER
SAYYID SYAMIL BIN SYED MOHAMED	S2194337
MUHAMMAD DANISH IMAN BIN ABD RAHMAN	22002450
AHMAD UZAIRIL AQIL BIN MOHD NAZZRI	22001832
ABDUL RAHMAN BIN SHAMSUDIN	22002623
MOHAMAD HAIQAL BIN BUJANG MOHAMAD ALI	22001995

COURSE CODE : WIX1002

COURSE NAME : FUNDAMENTALS OF PROGRAMMING

CLASS : OCCURRENCE 9

LECTURER : DR. LIM CHEE KAU

FORMATION OF GROUP

For the assignment, we formed a team of five people and named the group GOBLOCK. Each of us has different skills which brought the group alive, for an example Sayyid has a strong foundation in Java, Haiqal has strong knowledge in GUI Development, Rahman can think algorithmically, Aqil has a special skill in solving problems and Danish has a strong leaderships skill. We picked team members based on their studies, capabilities and what they're good at, making sure we had a diverse and capable group. Therefore, having diverse skills in one group can be extremely useful as if someone has a problem or had no idea in a certain area, there will always be a team member who will assist in solving the problem. We wanted to work together and offer an innovative idea to complete the project. Everyone had specific roles that matched what they were best at, making things run smoothly. This careful planning made our team strong and ready to face the assignment's challenges which is to program Price Tracker with excitement and skill.

ROLE AND ASSIGNED WORK FOR EACH MEMBER

Although we have diverse skills in one group, we did not separate work based on the expertise or skill each of us good at. This is to ensure every member of the group tries out, learns new things, and acquires new skills.

Name	Role	Assigned work
SAYYID SYAMIL BIN SYED MOHAMED (S2194337)	Project Director / Lead Developer	<ul style="list-style-type: none">• Managed responsibilities of each member• Determined the project's direction.• Lead front – end and back – end development
AHMAD UZAIRIL AQIL BIN MOHD NAZZRI (22001832)	Chief Secretary / Deputy Lead Developer	<ul style="list-style-type: none">• Assisted in coordinating the team.• Assisted in the development of the login and registration of the management system.• Handled managerial reports

MOHAMAD HAIQAL BIN BUJANG MOHAMAD ALI (22001995)	GUI Builder	<ul style="list-style-type: none"> • Implemented effective code integration strategies. • Assisted in the data viewing part of the program
MUHAMMAD DANISH IMAN BIN ABD RAHMAN (22002450)	Data Engineer	<ul style="list-style-type: none"> • Managed and administered databases. • Ensured data integrity and optimal performance. • Assisted in the development of the import data system
ABDUL RAHMAN BIN SHAMSUDIN (22002623)	Quality Assurance Analyst	<ul style="list-style-type: none"> • Contribute to the development and improvement of the management system. • Monitored and optimizing the performance of the management system

PROJECT TIMELINE

WEEK 4

- Group formation and topic selection.
- One topic is chosen for the assignment out of 8 topics.
- Initial research on price tracker functionality and Java libraries/tools.
- Begin brainstorming and outlining the project's structure.

WEEK 5

- Roles assigned to each team member.
- Detailed planning of the project's functionalities and division of tasks.
- Start the basic framework development for the price tracker.

WEEK 6

- Meeting to discuss progress and any adjustments required in the initial plan.
- Start implementing basic features like data retrieval and storage.

WEEK 7

- Midterm exam – reduce intensive project work during this time.

WEEK 8

- Resume the project work post-midterm exams.
- Implement additional functionalities and work on integrating the UI.

WEEK 9

- Intensive coding phase to ensure core features are functional.
- Begin initial testing of the application's functionalities.

WEEK 10

- Continued testing and debugging phase.
- Refinement of the user interface.
- Finalize coding aspects and prepare for the testing phase.

WEEK 11

- Final testing, bug fixing and user interface refinements.
- Prepare all documentation required for the project submission.

WEEK 12

- Document the entire development process.
- Write a comprehensive report, including problem statements, approach and results.
- Prepare for the final project presentation.

WEEK 13

- Presentation of assignment.
- Wrap up any remaining tasks for the submission.

WEEK 14

- Submission of assignment.

PROBLEM FACED AND SOLUTIONS IN ACCOMPLISHING THE ASSIGNMENT AND THE SOLUTION

As a team embarking on the development of a price tracker using Java, our group encountered several challenges that hindered our progress significantly. The complexity of the code required for this assignment surpassed our current skill level in Java programming. The intricacies involved in structuring and implementing the codebase proved to be daunting, posing a substantial hurdle in achieving our objectives. Additionally, the lack of prior exposure to Graphical User Interface (GUI) development and database integration within the Java environment presented considerable obstacles. We found ourselves at a disadvantage due to the absence of comprehensive knowledge and hands-on experience in these fundamental areas, making the successful execution of the assignment increasingly arduous.

To address these challenges and enhance our capabilities for the completion of the price tracker assignment, our team is actively seeking resources beyond the conventional classroom setting. We are leveraging various online platforms, such as AI-powered learning tools and educational content available on platforms like YouTube, to supplement our understanding of complex coding practices, GUI development, and database integration. These resources offer comprehensive tutorials, practical demonstrations, and real-world examples, enabling us to grasp the essential concepts more effectively. By harnessing the wealth of information available through these channels, we aim to bridge the knowledge gap and acquire the necessary proficiency to tackle the complexities of Java coding, GUI development, and database integration, thus empowering us to successfully accomplish the price tracker assignment.

Besides, one of the prominent obstacles our group faced while undertaking the development of the price tracker project was the constraint of time. Balancing numerous commitments, including individual assignments, college projects, and other subject-related tasks, posed a significant challenge. The limited availability of time and the juggling of multiple responsibilities significantly impacted on our ability to dedicate ample focus and attention to this assignment.

In response to these time management challenges, our group is implementing better time management strategies. We're creating detailed schedules, prioritizing tasks, and setting aside dedicated time for the price tracker project. Delegating responsibilities within the group and utilizing collaborative online tools aim to streamline our efforts and maximize productivity, ensuring more focused work on the assignment despite time constraints.

In summary, our team acknowledges the challenges in Java programming, GUI development, and database integration for the price tracker assignment. Actively seeking resources online, we are enhancing our skills. Time constraints prompted improved time management strategies, including detailed schedules and collaborative workflows. Committed to overcoming challenges, we aim to deliver a proficient solution, showcasing our dedication to mastering essential skills for project success.