

QBA and Programming Courses project description for the 3rd year students

Dear Students,

We hope this message finds you well. As part of your academic curriculum for the third year in the Management Information Systems (MIS) department, you are assigned a project that will contribute to your final grades in both Quantitative Business Analysis (QBA) subject by Dr. Ghada A. Elkhayat and Programming subject by Dr. Abeer Amer.

Please find the details of the project below:

1. Marks Allocation:

- You will be graded separately for QBA and Programming, with 10 marks assigned for each subject.

2. Group Size:

- Each project group should consist of a maximum of 6 students.

3. Project Description:

- The project will involve selecting one of the Quantitative Business Analysis (QBA) following topics and implementing it using the Java programming language:

- 1) Solve the transportation problem with a Vogel approximation and stepping stones to find the optimal solution by using Java.
- 2) Solve the transportation problem with the Northwest Corner method and stepping stones to find the optimal solution by using Java.
- 3) Solve the assignment problem using the Hungarian algorithm.
- 4) Solve the network problem by using the shortest path method.
- 5) Solve the minimum spacing tree problem.
- 6) Solve the transportation problem with minimum cell costs and the stepping stone method to find the optimal solution.

4. Video Explanation Requirement:

- Each project group is required to create and upload a video presentation lasting no more than 3 minutes. In this video, team members should articulate and visually explain the implemented Java code and its functionality.

5. Deadline:

- The deadline for the project submission is January 5, 2024, at 10:00 PM.

6. Submission Platform:

- Please submit your project at the following link:
<https://forms.gle/6jinR56eqv9H4qA2A>.

7. Submission Guidelines:

- Ensure that your project is submitted only once. Multiple submissions will not be considered.

8. Inquiries:

- For any Java syntax-related inquiries, please contact Miss Aya Aly Hassan.
- For any logical inquiries related to the project, please contact Mr. Ahmed Hasaneen.

We encourage you to collaborate effectively within your groups, leveraging the strengths of each member. This project aims to enhance your understanding of both QBA concepts and Java programming skills.

Good luck with your project, and feel free to reach out if you have any further questions.

Best regards.