

Question 1) Consider the project database designed and implemented during previous semester i.e. Fall 2024. Its implementation was done using structured query language during previous semester. Try to recall major relations in your project database. You already have its report in printed form.

There is a need to implement a web based solution for above mentioned database. The web based solution must incorporate various functionalities of your project.

- (1) Registration of Student/Patient/Passenger/Customer, or whatever is applicable in your project.
- (2) Search facilities including partial matches
- (3) Any other project specific functionalities
- (4) Role based access control
- (5) Payment system (if required)

As a first step design above mentioned (i) to (v) user interfaces using paper and pencil.

Next write appropriate html for creating (i) to (v) user interface prototypes.

Create links for navigation among above pages.

Design a menu using list and styles.

Add help pages for user guidance.

Either use table for layout or may opt for flow based layout.

Test user interface prototypes in browser.

Experiment with style sheets.

Question 2) In order to further extend the scope of project you are advised to think over, how business intelligence can be incorporated in above system. You may consider the following two requirements of business intelligence:

- i) Try to apply segmentation analysis in your system?
- ii) How user profiling can be added?