INFO 1113 – System Analysis and Design Project

| NAME: | Student NO.: | |
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| NAME: | Student NO.: | |

INFO 1113Project

Action:

- 1. Select your team group members (minimum of 4 and maximum of 5 with my approval only)
- 2. Send the list of your group members to your professor
 - a. Project Name
 - b. First name, last name
 - c. Student ID's for all 4 students
- 3. Once the project name has been selected and assigned to your team
- 4. Start working on the project
- 5. First week present your draft project plan with your professor for review during your next lab.
- 6. Note: project selections are on bases (first come first served).

OBJECTIVE:

To develop a mini-project following the listed below.

- 1. Follow the project plan template provided
- 2. Develop MS Project plan (Gantt chart), critical path and project network should be highlighted.
- 3. Develop DFD diagram with UML for the required project
- 4. Develop E-R diagram with UML for the required project
- 5. Create project prototype for the required project using free application online called **justinmind** link provided below.
- 6. Create and copy all testing cases for the project at the appendixes (minimum 5 testing cases for each interface)
- 7. Attach all the diagrams and Gantt chart in your document in appropriate place.

Assume that the organization decided to proceed with IN HOUSE SOLUTION.

- 8. Prepare a presentation slides (not more than 10 to 12 slides only) for your project (each team member will be required to present at least 1 or 2 slides.
- 9. I have allocated 10 minutes for each presentation and we will count 2 minutes for Q&A.

Software and tools required for the project.

Note: Any Microsoft software should be available for FREE on KPU portal:

- a. Login to www.portal.azure.com
- b. Then search for education, it should bring you to education portal
- c. Then select software, then all IT software should be available for you... search for MS Project or other software.
- 1. For project report use MS Word (any Microsoft version)
- 2. For project presentation use MS power point (any Microsoft version)
- 3. For Gantt chart, network diagram and project WBS use MS Project (any Microsoft version) or free

alternative to MS project (https://www.techrepublic.com/blog/five-apps/five-free-microsoft-project-alternatives/)

- 4. For budget and financial calculation use MS excel (any Microsoft version)
- 5. For diagrams use MS Visio (any Microsoft version) or www.draw.io
- 6. For prototype use (https://www.justinmind.com/)

Suggested domains for Mini-projects

Note: each group can pick ONLY 1 Project from the project list below:

Requirements: First come first serve - no more than 1 group select the same project name

- 1. Mobile application (APP) Passport automation system.
- 2. Mobile application (APP) Book bank
- 3. Mobile application (APP) Exam Registration
- 4. Mobile application (APP) Stock maintenance system.
- 5. Mobile application (APP) course reservation system
- 6. Mobile application (APP) E-ticketing
- 7. Mobile application (APP) Employee management system
- 8. Mobile application (APP) Credit card processing It's like personal wallet APP on your phone.



AIM

To develop the Passport Automation System using MS Project, MS Visio Software, Java and SQL access and justinmind for prototype tool.

PROBLEM ANALYSIS AND PROJECT PLAN

To simplify the process of applying passport, software has been created by designing through MS Visio tool, using Justinmind Prototype as a front end and Microsoft access as a back end. Initially the applicant login the passport automation system and submits his details. These details are stored in the database and verification process done by the passport administrator, regional administrator and police the passport is issued to the applicant.

PROBLEM STATEMENT

- a. Passport Automation System is used in the effective dispatch of passport to all of the applicants. This system adopts a comprehensive approach to minimize the manual work and schedule resources, time in a cogent manner.
- b. The core of the system is to get the online registration form (with details such as name, address etc.,) filled by the applicant whose testament is verified for its genuineness by the Passport Automation System with respect to the already existing information in the database.
- c. This forms the first and foremost step in the processing of passport application. After the first round of verification done by the system, the information is in turn forwarded to the regional administrator's (Ministry of External Affairs) office.
- d. The application is then processed manually based on the report given by the system, and any forfeiting identified can make the applicant liable to penalty as per the law.
- e. The system forwards the necessary details to the police for its separate verification whose report is then presented to the administrator. After all the necessary criteria have been met, the original information is added to the database and the passport is sent to the applicant.
- f. Be creative and add as much as interfaces pages your intended for your client to see.

| | Mobile Application BOOK BANK MANAGEMENT SYST | EM |
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AIM

To develop a project of Book bank management system using MS Project, MS Visio or draw.io Software and to implement the software in Justinmind Prototype.

PROBLEM ANALYSIS AND PROJECT DESIGN

The book bank management system is a software in which a member can register themselves and then he can borrow books from the book bank. It mainly concentrates on providing books for engineering students.

PROBLEM STATEMENT

The process of members registering and purchasing books from the book bank are described sequentially through following steps:

- a. First the member registers himself if he was new to the book bank.
- b. Old members will directly select old member button..
- c. They select their corresponding year.
- d. After selecting the year they fill the necessary details and select the book and he will be directed towards administrator
- e. The administrator will verify the status and issue the book.
- f. Be creative and add as much as interfaces pages your intended for your client to see

| Mobile Applicatio | n EXAM REGISTRATION SYSTEM |
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AIM

To develop a project Exam Registration using MS Project, MS Visio or draw.io Software and to implement the software in Justinmind Prototype.

PROBLEM ANALYSIS AND PROJECT PLANNING

The Exam Registration is an application in which applicant can register themselves for the exam. The details of the students who have registered for the examination will be stored in a database and will be maintained. The registered details can then be verified for any fraudulent or duplication and can be removed if found so. The database which is verified can be used to issue hall tickets and other necessary materials to the eligible students.

PROBLEM STATEMENT

The process of students accessing the registration application and applying for the examination by filling out the form with proper details and then the authorities verify those details given for truth and correctness are sequenced through steps

- a. The students access exam registration application.
- b. They fill out the form with correct and eligible details.
- c. They complete the payment process.
- d. The authorities verify or check the details.
- e. After all verification the exam registration database is finalized.
- f. Be creative and add as much as interfaces pages your intended for your client to see

AIM

To develop a project stock maintenance system using MS Project, MS Visio or draw.io Software and to implement the software in Justinmind Prototype.

PROBLEM ANALYSIS AND PROJECT PLANNING

The Stock Maintenance System, initial requirement to develop the project about the mechanism of the Stock Maintenance System is caught from the customer. The requirement are analyzed and refined which enables the end users to efficiently use Stock Maintenance System. The complete project is developed after the whole project analysis explaining about the scope and the project statement is prepared.

PROBLEM STATEMENT

The process of stock maintenance system is that the customer login to the particular site to place the order for the customer product. The stock maintenance system are described sequentially through steps

- a. The customer login to the particular site.
- b. They fill the customer details.
- c. They place the orders for their product.
- d. The vendor login and views the customer details and orders.
- e. Be creative and add as much as interfaces pages your intended for your client to see



AIM

To design an object oriented model for course reservation system using MS Project, MS Visio or draw.io and implement the prototype using justinmind application.

PROBLEM ANALYSIS AND PROJECT PLANNING:

The requirement form the customer is got and the requirements about the course registration are defined. The requirements are analyzed and defined so that is enables the student to efficiency select a course through registration system. The project scope is identified and the problem statement is prepared.

PROBLEM STATEMENT

- a. Whenever the student comes to join the course he/she should be provided with the list of course available in the college.
- b. The system should maintain a list of professor who is teaching the course. At the end of the course the student must be provided with the certificate for the completion of the course.
- c. Be creative and add as much as interfaces pages your intended for your client to see



AIM

To develop the E-Ticketing System using MS Project, MS Visio or draw.io Software and to implement the software in Justinmind Prototype.

PROBLEM ANALYSIS AND PROJECT PLANNING

In the E-Ticketing system the main process is a applicant have to login the database then the database verifies that particular username and password then the user must fill the details about their personal details then selecting the flight and the database books the ticket then send it to the applicant then searching the flight or else cancelling the process.

PROBLEM STATEMENT

The E-Ticketing system is the initial requirement to develop the project about the mechanism of the E-ticketing system what the process do at all.

- a. The requirement are analyzed and refined which enables the end users to efficiently use the E-ticketing system.
- b. The complete project is developed after the whole project analysis explaining about scope and project statement is prepared.
- c. The main scope for this project is the applicant should reserved for the flight ticket.
- d. First the applicant wants to login to the database after that the person wants to fill their details.
- e. Then the database will search for ticket or else the person will cancelled the ticket if he/she no need.
- f. Be creative and add as much as interfaces pages your intended for your client to see



AIM

To develop a project employee management system using the MS Project, MS Visio or draw.io Software from the UML diagram and to implement the software in Justinmind Prototype.

PROJECT ANALYSIS AND PROJECT PLANNING

The employee management system is used to manage our personnel things such as maintaining databases in offices etc. this project is easy for the CEO to handle the details. This is personally used for CEO.

PROBLEM STATEMENT

The CEO must enter the name and password to login the form and select the particular employee to view the details about that employee and maintaining the employee details personally. This process of employee management system are described sequentially through following steps,

- The CEO login to the employee management system.
- He/she search for the list of employees.
- Then select the particular employee.
- Then view the details of that employee.
- After displaying the employee details then logout.
- Be creative and add as much as interfaces pages your intended for your client to see

| Mobile Application CREDIT CARD PROCESS | ING SYSTEM |
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AIM

To develop a project credit card system using the MS Project, MS Visio or draw.io Software from the UML diagram and to implement the software in Justinmind Prototype.

PROBLEM ANALYSIS AND PROJECT PLANNING

The Credit Card Processing System which is use to purchasing an item from any shop mall, and it is used to maintain the limitation of credit card balance and current transaction process could be update via credit card machine. This project mainly used for large amount of item can be easy to buy from anywhere and required transaction process should be maintained them.

PROBLEM STATEMENT

The customer should select the item to be purchase from the shop by using credit card payment then the vendor should give a bill for the selected item . The customer should give his card to swap and request for the kind of amount transaction. After processing the transaction, the CREDIT CARD MACHINE should give the balance print statement or receipt.

- Customer should select the item from the shop.
- Vendor makes the bill for the selected item.
- Customer gives the credit card to the vendor to swap the card.
- They required amount transaction is done by the card reader.
- Vendor will issue the balance statement to the customer.
- Customers put the signature in the receipt and return to the vendor
- Be creative and add as much as interfaces pages your intended for your client to see