**Senior Demonstration Projec**t is a senior capstone project that provides a student experience in applying problem requirements and specifications to produce a solution.  This requires exploration of suitable information technologies to produce a solution that improves the problem situation.  Students will analyze, plan, and report on the project and implement a working prototype that will be demonstrated to an audience at the end of the semester.

The purpose of the class is to allow all Information Technology students an opportunity to demonstrate mastery of the project development methodology. An acceptable project meets some need and is able to be completed by combining and extending software/hardware functionality to meet the client’s needs.

**Grading Rubric That must be met in order to pass the class:**

* The project utilizes one or more technical concepts or practices in a complex and creative way that demonstrates a high level of sophistication
* User needs were indentified and analyzed thoroughly to result in an exceptional computer-based system.
* Integration of ITbased solution into the user environment is very effective
* The project demonstrates a through and extensive understanding of standards and practices and their application.

Another item you should review in defining your project is the scope of the project.  Remember that the project must solve a valid problem using technology(s), which will require you to go beyond your current comfort level to prove that you have the ability as a future IT graduate to solve problems with the ever changing technical advances we are currently seeing.  The better project would be one that tries to solve a problem, which has not been solved.  A project that focuses on a problem that has already been solved does not necessarily mean that the project is not valid, but it must show how the project will advance the current solution; a more efficient solution may be needed.

----------------------------------------------------Read Below-----------------------------------------------

#### **Instructions of report**

This report should be composed of Parts 1-5 and 10 of the final paper.

1)      **Title and Executive summary** (about 1 page)

2)     **Problem statement** (minimum 1 page)

               a)       Rationale statement (why is this a problem)

               b)      Identify the stakeholders and how they benefit (who benefits from this solution and how)

3)      **Evaluation of technology requirements** (3 pages minimum)

               a)      Clearly list and discuss the hardware and software tools required for completion of your project

4)     **Prototype design specification**

               a)      Architecture (software/hardware) (2-3 pages)

i)        Deployment Diagram describing hardware, connectivity, and software modules

               b)      Software design to include the following as needed (3 pages)

i)        For database design, Entity-Relationship diagram

ii)      For scripting applications, Standard Flow Chart

iii)    For interfaces including Web application, screen prototypes

5)     **Prototype implementation and evaluation**

               b)      HCI Usability/User analysis (2-3 pages)

i)        Describe the users and what are the user requirements

ii)      Conduct a user analysis using the use case narratives as a guide and create a report of the results

**References (See guidelines below)**

**This paper MUST be written in your own words** . Anything that you copy word-for-word **must**be enclosed in quotes. Paraphrased statements **must**be properly cited within the paper body.

I have 2 parts in my Project, Please read the proposal to make sure you get the project idea.

**Project title: Flight Reservation System and Live Flight Tracker**

1. **Flights Reservation System:**

My idea for this project is to develop a Flight Reservation System where an admin can Add, Edit, and Delete flight route and fare. Moreover, the admin can also view and print of yearly, monthly or weekly reports. Whereas a customer can book a flight with a shortest path and fare. The customer will also review a report of booking summary. This system will be done using visual basic and will store data in database SQL.

Please find only good solid reliable sources when describing problem and solution and user needs …etc.

1. **Raspberry Pi Live Flight Tracker**

The idea for this is to let user track flights near the user’s area.