**CS 492**

Final Project

**Due 3/26 Survey paper**

**Due 3/28 Project proposal**

**Due 4/30 Beginning of class – Final project**

**FOR THE FINAL PROJECT YOU MAY WORK IN GROUPS OF 2.**

For the final project you will be creating an application that demonstrates the concepts and technologies we will have covered in class. You have the freedom to decide what application you feel best demonstrates the concepts and also is interesting to you. The size of the project should be roughly equivalent to four homework assignments not including survey paper, word document write up or presentation.

Key items you will be submitting:

**Part 1:  Survey paper**

* Survey an area of security related to our class topics that you are interested in. Discuss different approaches to the problem and discuss work related to the area. Related work could be aspects of other existing applications with similarities or could be more theoretical analysis. Key focus of paper is what security concepts your project will be addressing and comparisons either in full or in part to other works/research.
* Minimum 5 pages (not counting figures, tables, references, etc), double spaced, 10 pt Times New Roman font;
* All references must be properly cited;
* Contributes 5 percent toward the course total;

**Part 2: Final project**

1. ***Commented*** **Application source code**
2. **Word document** that briefly describes your application and what class concepts/algorithms you incorporated and why you feel the design you choose was well suited to application functionality.
3. **Presentation (Powerpoint or PDF) -** You will be asked to demonstrate your application for myself and your classmates and explain what concepts you incorporated and why and how you implemented them (Code demo and Powerpoint presentation) approximately 15mins. Suggested format:
   1. Powerpoint introduction to application
   2. Application demo
   3. Powerpoint description of application implementation and how it was decided upon

# Key things you must include/create:

* Well thought out justification for your design decisions
* **Commented** source code

Characteristics of a good project are:

* A non-trivial application that does not just duplicate some code covered in class and incorporates more than one concept covered
* If you do information hiding your project **must** incorporate more than just hiding and retrieving data
* If you are focusing on implementing encryption you must be able to use CBC for your block cipher encryption
* A GUI front end to demo or utilize the code you develop
* Well thought out justification for your design decisions
* A presentation that shows thought has gone into it beyond just a application or code walkthrough

**Tentative in class criteria your peers will be judging your project on:**

1 2 3 4 5 Clear, detailed explanation of security concepts and how implemented

1 2 3 4 5 Final project’s demonstration adequately showed concepts discussed

1 2 3 4 5 Overall presentation

1 2 3 4 5 Originality of project’s demonstration of class concepts

**To ensure you are on the right track I ask that you submit a half page write up of your proposed application by 3/28 link to submit will be posted post midterm.**