# CIS 435 Project 4

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**Points:** _____ / 200 pts

## 1 INSTRUCTIONS/OBJECTIVES

You may work by yourself, or in a small group (**of up to 4 people.**) Your project is largely open-ended, but should be substantial, creative, and somewhat interesting and/or useful. It should not be just a tiny little adjustment of a previous project.

**This project must be a full stack application.**

- **Your project must have a front-end using HTML, CSS, and JavaScript**
  - **You may use React, but are not required to do so**
- **Your project must also have a back-end**
  - **Application server technology using Node or PHP**
  - **Database functionality using MySQL/MariaDB or MongoDB.**

**Note that I personally own *literally* hundreds of programming / web development books, both digital and paper (and have read many of them).** I say this because I am aware of dozens upon dozens of different projects and their solutions so don't just steal another book's solution and pretend it's your own. I don't mind you being inspired by another book or its projects, but **cite your sources**. Plagiarism and cheating are very naughty!

Ultimately, there will be the following deliverables for individuals and/or groups:

- **The zipped source code** and SQL dump of your project
  - Including all HTML, CSS, JavaScript, Node code, PHP, MySQL/MariaDB dump, copy of MongoDB collection(s) with documents etc.

- A **report** (PDF) containing
  - Group member (or individual) names, and their primary roles/responsibilities for the project **on the first page and/or cover of the report**
  - Information on your design considerations
  - User Interface design (mockup of the interface, or other prototype)
  - System components and functions
    - At least one of the following: UML activity diagrams, sequence diagrams, or other appropriate UML.
  - A summary/conclusion, including what you learned

o   Report must be 4 – 6 pages

- A **tutorial** (PDF) with screenshots of the Web application being used
    o   This tutorial should be at least 4 pages long
    o   Usage scenarios should be documented thoroughly with screenshots/images to help understand how to use your application

## 2   IDEAS/EXAMPLES

Previous students in CIS 435 have created interesting projects, including the following:

- Music sharing community
- Park review website
- Japanese character writing practice application
- Garage sale finder
- Restaurant order management system
- Online ticket ordering system
- Virtual lost and found board
- Snap and share (picture sharing)
- Online movie rental application
- Cartesian mapping tool
- Online game arcade
- Other games like Solitaire
- Web-based programming contest control system
- Online bookstore
- Content aware chat application
- Bookmarker
- Electronic flash cards
- Real estate application
- Playlist / YouTube hybrid

You may pick and provide a variation on any of these, or come up with something on your own/with your group.

## 3   GRADING CRITERIA

- Originality
- Quality of report
- Quality of system implementation
- Demonstration of ability to use a variety of Web-based technologies

# 4  DELIVERABLES

You must turn in a zip file of your project, including HTML, CSS, JavaScript, PHP, MySQL dump, Node code, and/or MongoDB as well as your **report and tutorial** and any other required documentation mentioned in the instructions above.

If you work in a team, **only ONE member of the team must turn in the zip file**, but the **NAMES of the individuals** on the team should be clear in the report and the comments in the code when turning in the assignment.

**IF YOU USED your own hosting service or Amazon AWS:**  You should also provide a link to where the project is published, whether your own hosting service, Amazon AWS, another cloud platform, or some other platform.  **You are responsible for any/all charges that could occur.  You will not be reimbursed by the CIS department, instructor, University, or magic money faeries.**