University of Windsor

School of Computer Science
https://cs.uwindsor.ca

Master of Applied Computing
COMP-8347
Internet Applications and Distributed Systems

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Project Description

Your task is to create a website using Django, Python, and PyCharm which you will learn during your lectures and labs. This website should be based on the theme of "Online Learning" such as Blackboard, Brightspace, Coursera, and so on. You can also visit the following link to see different "Online Learning" websites: https://www.thegoodtrade.com/features/online-education-websites/

Mandatory Features

- Your website should contain all the necessary things you learned during the labs/lectures such creating and editing models, views, templates, forms, user authorizations, user sessions, cookies, authentication, and so on.
- Should contain a **Course Builder**: Allows users (ex. instructors or teachers) to design courses and upload files.
- Should contain a **Membership Option:** Provides different services to users based on their membership category (ex. gold, silver, bronze). This also includes users registrations.
- Should contain a **Payment Gateway:** Allows users to pay for courses/services in different currencies.
- Should contain a **Student Management System:** Tracks students progress (ex. attendance, views, grades, etc.).
- Design and color scheme of the website.
- Should be made using the tools learned in the class (ex. Python, Django, and PyCharm)

Other Features

- Save your database in JSON format. Load initial data using fixtures.
- Update index and detail view functions in **views.py** to use class-based views (https://docs.djangoproject.com/en/3.1/topics/class-based-views/).
- Use Bootstrap to style your pages.
- Login, logout, and forgot password features.
- Any other relevant features such as grading system, video tutorials, language support, certificates, and so on.

Groups, Submission, Due Dates, and Marking Criteria

- **Group** = 6 members per group (same as your Magazine Research Article group).

- **Submission** = Only via Brightspace. Submit an MS Word document that should describe your project including the steps you performed to create your website, the motivation and reason for choosing your idea, the role of each team member (preferably a table or a graph), and the related screenshots. This document should have the links to your website and the code files stored on any sharing platform such as Git, OneDrive, and so on. The word file should not be submitted as a part of any folder.

- **Due Date** = Sunday of Week 10, before midnight. Only one submission attempt is allowed.

- **Total Marks = 20**. You will be judged on:

  - Individual oral exam/viva
  - Completion of the project
  - Running your website without errors
  - Satisfaction of the mandatory features
  - Additional features
  - The overall look of your website
  - The documents and files you submit on BB.

Note that the above mark distribution may subject to change.

Note 1: Relative marking will be done here. For example, if one of the groups has a brilliant website with all mandatory and several interesting features along with the satisfaction of the above marking conditions, then that group gets the full marks. This group will thus be placed in the "brilliant/excellent" category. Other projects with lesser quality than the brilliant project, will be placed in categories of "very good", "good", "average", and "incomplete", accordingly. Marks deduction will be done as per the category.

Note 2: Every group member should have coding contribution using Python/Django/PyCharm.

Note 3: Please note that the above instructions, submission guidelines, and marking criteria may change in the later phase of the term.

Note 4: Usage of ChatGPT or taking code from other sources will result in '0' marks.

Presentation Schedule and Details:

- Presentations will be conducted in Week 11 (during lectures)
- Presentation duration for each group (**subject to change**) = **20 Minutes** + **10 Minutes** for Question/Answer session.
- You may prepare a PowerPoint presentation -OR- directly run the application demo -OR- combine both, however, running your application in front of the audience is mandatory.
- The order of presentations will be decided randomly during the class.
- Further points might be added later, thus, keep checking the Brightspace announcements.

Viva/Oral Exam Schedule:

During the lectures of week 12.