# **CPS630 Project**

### **TMU Classifieds Web Interface**

### **Project Overview:**

In this project, you will develop a commercial-grade web interface for a classified advertisements website tailored specifically for TMU students. The primary objective is to create a platform where TMU students can post and browse classified ads in categories like "Items Wanted", "Items for Sale" and "Academic Services." The website must be responsive and fully functional on both desktop and mobile computing platforms.

### **Key Features:**

- 1. **User Authentication:** Secure login and registration system for students.
- 2. **Responsive Design:** The interface should adapt seamlessly to desktop and mobile screens.
- 3. Classified Ad Categories:
  - **Items Wanted:** A section for students to post ads seeking specific items.
  - Items for Sale: A section for students to post ads selling specific items.
  - **Academic Services:** A section for offerings such as tutoring, textbook exchanges, and study groups.
- 4. **Search Functionality:** Efficient search capabilities with filters (e.g., category, price, location).
- 5. **Ad Posting Interface:** A user-friendly interface for posting new ads with text, images, and relevant details.
- 6. **Communication Platform:** A secure system for users to communicate with each other within the website.
- 7. **Admin Dashboard:** For site administrators to manage ads, users, and site content.
- 8. **Mobile Optimization:** Ensure full functionality and user experience on mobile devices.

## <u>Technical Requirements:</u>

- 1. **Front-End Development:** Use of HTML5, CSS3, and a modern JavaScript framework (e.g., React, Vue.js).
- 2. **Back-End Development:** Server, database, and application logic (e.g., using Node.js, Python with Django, or Ruby on Rails).

- 3. **Database Management:** Efficient handling of data storage and retrieval.
- 4. API Integration: For additional features like maps, payment gateways, etc.
- 5. **Security:** Implementation of best practices in web security.
- 6. **Testing:** Comprehensive testing on various devices and browsers.

#### <u>Deliverables:</u>

- 1. **Codebase:** Well-documented source code with clear instructions for setup and deployment.
- 2. **User Manual:** A guide on how to use the website, aimed at end-users.
- 3. **Video Demo:** A video demonstrating the website's features and functionalities. Video duration: 10 minutes maximum

#### Assessment Criteria:

- Functionality and adherence to requirements.
- Code quality and documentation.
- User experience and design aesthetics.
- Performance and responsiveness on different devices.
- Creativity and innovation in features and problem-solving.

#### Note:

- You may work in groups of 4-5 students.
- All group members must contribute equally to the project.
- **Deadline for submission:** Friday, April 5, 2024, 11:59 PM (no extensions)