Programming Foundation

WIL Project
2024

CTU training solutions | Creative & Technology Universitas

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Purpose

The purpose of this project is to provide students with experience of collaborating between various subject streams. The project simulates industry practice and will contribute to students' Work Integrated Learning (WIL) component. The simulated project further encourages integration between the learning environment and reality as well as allowing for the development of critical cross field skills:

- Identify and solve problems in which responses demonstrate that responsible decisions using critical and creative thinking have been made.
- Work effectively with others as a member of a team, group, organisation, community.
- Organise and manage oneself and one's activities responsibly and effectively.
- Collect, analyse, organise and critically evaluate information.
- Communicate effectively using visual, mathematical and/or language skills in the modes of oral and/or written presentation.
- Use science and technology effectively and critically, showing responsibility towards the environment and health of others.
- Demonstrate an understanding of the world as a set of related systems by recognising that problem-solving contexts do not exist in isolation.

Evidence requirements:

Individual Work Integrated Learning (WIL) submission

Each individual member is to upload the following evidence to the WIL module on Campus Online and complete the WIL documentation and let the COM or Facilitator sign the WIL documentation. The WIL documentation should then be uploaded to Campus Online as evidence that WIL was completed.

- Completed WIL logbook detailing time spent on tasks completed in the development of the project.
- Evidence of the individual member's contribution to the project. This can include all planning documentation, input and elements completed for the final project.
- Activities and time reported on the WIL logbook should align with the evidence presented.

Submission

Project deadline:
12th July 2024, for 2023 Mid-Year intake.
31st October 2024 For Feb Intake

Submit a zip file which contains the following:
Signed logbook (Filled for every module, and contains screenshots of the source code)
PDF file (Outlining the project phases) – click here for more info

Overview

Project Title:

RealHome: A Real Estate Listing Platform

Project Overview:

RealHome will be an online platform where real estate agents and homeowners can list properties for sale or rent. The website will allow users to search for properties based on various criteria, view detailed information about each listing, and contact the listing agent or owner.

Project Objectives:

- Develop a user-friendly interface for listing and searching properties.
- Implement a robust database to store property details.
- Ensure the website is responsive and accessible on various devices.
- Integrate a secure user authentication system.

Key Features:

1. **User Registration and Login**: Secure user accounts for agents and potential buyers/renters.
2. **Property Listings**: Users can add, edit, or remove property listings.
3. **Search and Filter**: Search properties by location, price range, property type, and other criteria.
4. **Property Details Page**: Detailed information about each property, including photos, descriptions, amenities, and contact information.
5. **Interactive Map**: Integration of an interactive map showing property locations.
6. **Agent Profiles**: Profiles for real estate agents with their listings and contact information.
7. **Favorites and Wishlist**: Users can save favorite properties and create Wishlist.
8. **Mobile Responsiveness**: Ensure the website is fully responsive for mobile devices.
9. **Contact Form**: Forms for users to contact agents or property owners directly through the website.

Technologies to be Used (Recommended):

- **Frontend**: HTML, CSS, JavaScript, or React.js (or Angular/Vue.js).
- **Backend**: PHP, Node.js with Express.js, or Python with Django/Flask.
- **Database**: MySQL, PostgreSQL, or MongoDB (or WAMP).
- **APIs**: Google Maps API for property locations, Email API for notifications.
- **Hosting**: 000webhost, AWS, Heroku, or a similar FREE cloud service.
- **Version Control**: Git and GitHub.

Project Phases:

- **Requirement Analysis:** Define the project requirements and scope.
- **Design:** Create wireframes and design the UI/UX.
- **Development**: Code the front end and back end of the website.
- **Testing:** Perform thorough testing for bugs, performance, and security.
- **Deployment:** Deploy the website on a cloud server.
- **Maintenance:** Ongoing maintenance and updates based on user feedback.

NB: This must be documented in PDF.

FINAL SUBMISSION MUST INCLUDE THE LOGBOOK, PROJECT PHASES AND THE TASK CHECKLIST

Outcome:

At the end of the project, students will have developed a fully functional real estate listing website that demonstrates their skills in full-stack web development, database management, and user interface design. The project will also serve as an excellent portfolio piece to showcase their abilities to potential employers.

Task completion checklist (Complete this and attach it to your pdf file)

No.	Task description	Status	Tick/check
1	Define project requirements and scope	Not Started	☐
2	Create wireframes and design the UI/UX	Not Started	☐
3	Set up version control repository on GitHub	Not Started	☐
4	Develop frontend with HTML, CSS, JavaScript/React.js	Not Started	☐
5	Develop backend with PHP/Node.js/Python	Not Started	☐
6	Implement database with MySQL/PostgreSQL/MongoDB	Not Started	☐
7	Integrate Google Maps API for property locations	Not Started	☐
8	Integrate secure user authentication system	Not Started	☐
9	Implement user registration and login features	Not Started	☐
10	Develop property listing functionality	Not Started	☐
11	Implement search and filter functionality	Not Started	☐
12	Create property details page	Not Started	☐
13	Develop agent profiles and contact forms	Not Started	☐
14	Implement favorites and wishlist features	Not Started	☐
15	Ensure mobile responsiveness	Not Started	☐
16	Perform thorough testing for bugs, performance, and security	Not Started	☐
17	Deploy website on cloud server	Not Started	☐
18	Ongoing maintenance and updates based on user feedback	Not Started	☐
19	Complete WIL logbook detailing time spent on tasks	Not Started	☐
20	Submit a zip file with signed logbook and PDF outlining phases	Not Started	☐