
SCIT

School of Computing and Information Technology
Faculty of Engineering & Information Sciences

SIM Session 4, 2022

Assignment 3 Outline

ISIT207 Frontend Web Programming

General Information

Subject Coordinator/Lecturer: Choy Kar Wai, Abel

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Assignment 2 has two parts:

Part A:

Practical application of Frontend Web Design using ReactJS technology for an integrated Pet Heaven Web application.

Part B:

Write a Review Report and do a Screen Recording demonstration video for the developed web application.

Submission Due Date on Moodle: 27 Nov 2022, 2359 hr. Percentage of final mark: 30%

Introduction

Frontend Web development technology is changing rapidly and it is important, in the development of a Web-based application, to learn and use the most current technology.

This is an individual assignment where you are to develop a Web application using React and other relevant technologies. However, to make this assignment interesting, you have the option of integrating your React components with another student's components. The required tasks are outlined below.

The purpose of the Web application is to help a charity society, Pet Heaven, that cares for the welfare of abandoned pets (i.e. cats and dogs where the original owner no longer want to keep them), and allow online visitors to make request for adoption of the abandoned pets.

The staff of the society will follow up with the online request, interview the requester, and find a suitable home for the abandoned pet.

This society requires web application to achieve the following functions:

- Communicate the purpose, facilities, and pet information of Pet Heaven society
- List the current pets available for adoption
- Allow visitors to register as a member and be a supporter of the society
- Provide an online form for pet owners who want to release their pets to the society
- Provide an online form for member who wants to adopt a specific pet
- The forms are to be mailed to the administrator of the society

For this assignment, you are to adopt the Component Based approach of Web programming and use ReactJS to achieve the above functions as requested. Reasonable assumptions can be made on the operational aspects of the society.

Note: the above functions are to be developed by individual student. However, you can work with another student to incorporate some of the following tasks to gain extra credits:

- Demonstrate development of Reusable component and integrate it in your Web application
- Deploy your runtime Web application on any available platform (eg. Firebase etc)
- Extra friendly features for browsing and searching
- Backend database access such as MySQL, MongoDB etc.
- Integration testing

Objectives

On successful completion of this assignment, students should be able to:

- i) Demonstrate a practical understanding and application of Frontend Web Programming in using ReactJS to design, structure, edit, integrate, and access information.
- ii) Demonstrate a practical understanding of Component-based Web programming principles to plan, design, and code a JSX program to retrieve information, displaying it with CSS specification and interaction.

Assignment Requirements and Method of Assessment

Part A & B: Practical application of Web design and programming:

- Demonstrate understanding of the application requirements – the charity society Pet Heaven
- Demonstrate the correct usage of ReactJS, JSX, HTML, CSS
- Integration of multiple pages into a SPA (Single Page Application)
- Database access and data entry validation
- Correctness, clarity, usability, and design quality of the web application

Note:

For Part b) of this assignment, you are required to:

Write a Review Report about the web application considerations as follows:

- Design decisions on functions, screen layout, styles, and database access
- Include the links to your deployed website and video recording on Google drive
- Export your review report in PDF format and upload it on Moodle

The screen recording must include screen walk-through with voice illustration to demonstrate the interaction and usage of the web application (note: the recorded video should be uploaded to Google Drive and provide a shared link URL in your report for viewing. You can use any screen recoding tool you are familiar with.)

Additional information will be discussed during class session for improvement beyond the basic requirements.

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Notes on Assessment

All assessment items are expected to be completed independently. Plagiarism may result in a FAIL grade being recorded for that assessment item. Students are strongly advised to carefully and thoroughly read the **Plagiarism** section below.

Students who copy lab work may receive zero for the lab assessment. This also covers work which may be the product of community effort by several students. Use of material that is not your own work must be acknowledged. Note: **Plagiarism will not be tolerated.**

Procedures for the submission of assessment items:

Students must refer to the Faculty Handbook and online references that contains a range of policies on educational issues and student matters.

Submission of assessment items via email will not be accepted.

Assessment Items are to be submitted electronically and in hardcopy format (if instructed)

Information regarding submission requirements will be in the Assessment Item Requirements.

Procedures for the return of assessment items:

All Assessment Items will be returned within 2 weeks of submission. In class assignments will be marked in class in the second week of the assignment by the tutors.

Penalties for late submission of assessment items:

Penalties apply to all late work, except if student academic consideration has been granted. Late submissions will attract a penalty of 25% of the assessment mark per day including weekends. Work more than four (4) days late will be awarded a mark of zero.

Plagiarism and cheating:

Plagiarism is the unacknowledged use of another person's work.

If you use ideas or material from a text, a website, a wiki, a blog or an article you must acknowledge.

If you do not, you will probably receive zero for the assignment in which you use it. Repeated plagiarism can lead to expulsion from the University.

If you copy another student's work, even if you have his or her permission, it is plagiarism and same rules apply.