#### **COURSEWORK ASSIGNMENT**

# UNIVERSITY OF EAST ANGLIA School of Computing Sciences

**UNIT: CMP-4011A: Web Based Programming** 

**ASSIGNMENT TITLE: Alumni Site.** 

DATE SET : 16/11/2016
DATE OF SUBMISSION : 15/12/2016
RETURN DATE : 13/01/2017

ASSIGNMENT VALUE : 30%

SET BY : G. Richards SIGNED: F. Richards

CHECKED BY : T. Wu SIGNED: T. Wu

#### Aim:

Develop competence in the design of Flask based web development.

#### **Learning outcomes:**

Ability to construct dynamic web applications using the Flask framework.

Ability to develop a suitable architectural design for an application.

#### Assessment criteria

The emphasis when marking will be on the functionality of the system, implementation and quality of code in terms of organisation, clarity and commenting. Further criteria are visual appearance of the web interfaces and ease of navigation of the system.

Marks will be allocated as detailed on the mark sheet below.

### **Description of assignment:**

Your task is to design and implement a web site using Python and the Flask framework.

This work will be carried out in pairs and will be **demonstrated in week 12**. In addition a submission will be made to Blackboard (see submission instructions below).

The website will be for a rental property similar to that implemented for the first coursework assignment but must use a server side approach using the Flask framework. JavaScript may be included to enhance the usability of the site.

The site should comprise a home page giving details of the property including a gallery and a separate page describing local attractions. It should be possible to enter and display comments. The comments should be stored on a server side csv file, not on local storage, and should include the name of the commenter and the date of the comment. Any other pages that you consider relevant may be included. The work completed for the first coursework may be re-used but each page must be rendered using the Python/Flask framework.

In addition, there should be a page for requesting a rental of the property. This page should allow a prospective renter to enter the dates for which they wish to rent the property and their name and email address. These details should be stored as a server side csv file which the owner can access and edit using Microsoft Excel in order to confirm the booking or edit the entries. The page should display dates when the property is rented out and whether the rental has been confirmed by the owner, details of the renter should not be displayed.

#### **Advanced features:**

You may include advanced features to make the site more useable. For example, the site could prevent double booking or different rental rates could apply to different periods and the total cost of rental could be calculated.

Additional marks will be awarded for any advanced features that are included.

#### **IMPORTANT NOTES**

The site **must** be implemented using Python and the flask framework, each page should be rendered using the Flask framework.

Use HTML5 for web pages - All HTML generated by Flask should be validated.

Use an external CSS style sheet for all styling of web pages - All CSS should validate. JavaScript may be included. Ensure that you always use relative references, if you use absolute references it may not be possible to view resources.

#### **Deliverables**

A working website using the flask framework including any referenced files.

Each partner should produce a PDF document detailing any special or advanced features of the site that they wish to highlight and any problems they might have encountered. This should not be a detailed description of work carried out and should be a maximum of one side of A4. **This is an individual report and you may comment of the contribution made by yourself and your partner.** Also, list the preferred browser for viewing the site.

# **Submission Procedure**

# Work will be marked by demonstration in the lab sessions in week 12.

#### In addition:

The main folder containing your Python program should include the static folder containing csv files, images and CSS and a template folder for Flask templates. Zip the main folder and its sub-folders into a single file and submit it to **Blackboard** by the submission date. Only one copy of the website should be uploaded.

Each member of the pair should submit their PDF document to the hub using evision.

#### **Deadlines**

Coursework should be submitted before 15:00 on the deadline day.

If coursework is handed in after the deadline day or an agreed extension:

Work submitted	Marks deducted
After 15:00 on the due date and before 15:00 on the day following the due date	10 marks
After 15:00 on the second day after the due date and before 15:00 on the third day after the due date	20 marks
After 15:00 on the third day after the due date and before 15:00 on the 20th day after the due date.	All the marks the work merits if submitted on time (i.e. no marks awarded)
After 20 working days	Work will not be marked and a mark of zero will be entered.

If students have a compelling reason for an extension to a deadline for a piece of work, they should submit a request before the deadline to the appropriate Learning and Teaching Service Hub, on a University Extension Request Form accompanied by appropriate evidence. Full details are given in the student handbook.

**Plagiarism:** Plagiarism is the copying or close paraphrasing of published or unpublished work, including the work of another student; without due acknowledgement. Plagiarism is regarded a serious offence by the University, and all cases will be investigated. Possible consequences of plagiarism include deduction of marks and disciplinary action, as detailed by UEA's Policy on Plagiarism and Collusion.

# **Mark Sheet**

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# **Student Number**

	Excellent	Very good	Good	Acceptable	Poor	Missing or Inadequate	Awarded Mark
Basic system							
Implemented using the Flask framework.							
All required pages included.	40	32	24	16	8	0	
Comments and bookings saved as lists.							
All links work as intended.							
Code Quality of code, (logic, layout and comments.) HTML5 validates CSS3 Validates	20	16	12	8	4	0	
Look and Feel							
The overall look and feel of the system.	20	16	12	8	4	0	
Advanced Features Any feature that go beyond the basic brief.	20	16	12	8	4	0	
Overall Mark							

Comments		