

School of Computing, Engineering and Mathematics (CEM)

Faculty of Engineering, Environment and Computing (EEC)

**5001CEM SOFTWARE ENGINEERING** | 2122

**PROJECT REPORT**

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1. **CODE PURPOSE**

The program I have created is a flask server that hosts an auction website. This website will allow users to create an account and sell whatever they want using the auction system.

// NB this is a comment for guidance. Delete all comments when you complete this template

// What the code does, in summary (not more than 30 words)

1. **CODE LOCATION**

**https://github.coventry.ac.uk/5001CEM-2122/Ben\_Godfrey\_Auction**

// This will be the 5001CEM 2122 organisation, to be announced (30 words)

1. **CODE INSTALLATION**

// How to download and install the code so that it can be run (100 words plus; screenshots will help)

1. **CODE EXPLANATION**

# Storage

The storage I am using is called sqlite. I am using this since it is simple and easy to use.

## Database structure

## Python implementation

# Flask

## Login

## Putting together HTML

# HTML

// This will almost certainly be the biggest part of your report (2000 – 2500 words)

// First, make sure your code is commented. Here’s an example

'''BUBBLE SORT

input: unsorted list

output: sorted list

Implements bubble sort with integral swap

'''

def bubblesort(a):

swap = True #declare flag ‘swap’, set to true

while swap: #while the flag swap is true (outer loop)

swap = False #set the flag swap to false

for i in range (len(a)-1): #(inner loop)iterate through the unsorted list from start to #penultimate element

if a[i] > a[i+1]: #if 1st element value is greater than the element to the right (2nd)

swap = True #set swap flag to true, and swap the two elements

savedval = a[i+1] #create a buffer to save the 2nd element value, savedval

a[i+1] = a[i] #set 2nd element to be the value of the 1st

a[i] = savedval #set the 1st element to be the value of the 2nd

return a #when the while loop completes, return the sorted list

print(bubblesort([4,1,6,8,2,9,0]))

// You only need to paste in code which is particularly interesting or important. It does not all need pasting – there will be lots of it

// code does not count towards word limit

// Do you need to comment everything? No. Only critical pieces of code, e.g. Flask apps and html templates, particularly communications between different modules – database, back end, front end.

// How many comments? The above is very thorough. You should show as much insight as you can into how the code works, but every line is a big ask.

// Explanation is usually high level and tells us about the functionality of the code. It is not the same as commenting, which tells us about the implementation. I’ll give examples.

// The template is landscape to allow more space for commented code.

1. **TESTING**

// around 500 words

.1 TESTING REGIME

// The set of tests the tester should run

.2 TESTS RUN ON EXTERNAL CODE

// Run the tests defined by your external (the other team member who has passed you their report)

// Show the output of the tests you’ve run and comment. Are there any tests which have failed? Are there tests which you’d expect to see, but which don’t appear? Are there further tests you’d suggest?

1. **QUALITY ASSURANCE**

// around 500 words

.1 QUALITY ASSURANCE STATEMENT

// Your statement about your work

.2 EXTERNAL QA EVALUATION

// Your evaluation of the external’s QA statement

1. **DOCUMENTATION**

// around 500 words

.1 DOCUMENTATION LIST

// List all documentation you have included

.2 EXTERNAL DOCUMENTATION INSPECTION

// Does all documentation appear? Is it usable – can you install and run? Do the tests make sense and can you run them?

// Do you understand the code explanation? Is there anything missing? Are there improvements you’d suggest?

**REFERENCES**

// do not count towards word limit

// You must reference any sites consulted and code used in your work. Code re-use is fine and a common practice (one reason why documentation is so important). Lifting entire code blocks including complete applications without attribution is an academic conduct offence and this has consequences.

// I’ll be saying more about how to reference code.