Advanced Programming

Assignment 2: Hackathon Introduction

Date: 1st April 2020

Introduction

A *hackathon* is an event, often held over 1-2 days, where software developers brainstorm and rapidly develop a prototype of a new piece of software. At MMU, we regularly hold hackathons for students looking to work on interesting projects outside of their studies, and we even have a student society that travels the country attending hackathons arranged by other universities and organisations. The format of this assessment was inspired by attending several of the hackathons here at MMU, and I hope that this challenges you in a way that feels unique, without being unduly pressured.

We will be running the hackathon as a single day assessment, with the full specification released at 9:00 am on the day of the hackathon, and all submissions due by 9:00 pm that same day. It will involve the creation of a client-server application, with an android app that retrieves data from a server, showcasing all the skills you have gained on Advanced Programming throughout the year.

Isn't this Just an Exam?

There are some big differences between this hackathon assessment and an exam, and my hope is that students find this format much less stressful than the formal examinations they have sat previously.

1. You don't have to work in any specific place, although I'll be in a lab for support.

2. You're able to use books, past work, or the internet if you need to look something up.

3. You're not asked to work in silence. Although this is an individual assignment and you can't work together in groups, you're perfectly able to have normal conversations with your friends, as you would in any lab session, or when working in the real world.

4. You'll have access to your tutors to ask questions, sanity-check ideas, and talk about your work as you're making progress.

Hackathon Schedule

The hackathon will be held on the 1st April 2020. It is your responsibility to ensure that you have organised your other commitments sufficiently to complete your work on this date.

Time	Activity
9:00 am	Assignment specification released. Work starts.
9:00 am	Tutor support available in C0.13 all morning, if you wish to work with supervision
12:00 noon	Tutor support unavailable for lunch hour
1:00 pm	Tutor support available in C0.13 all afternoon, if you wish to work with supervision
6:00 pm	Tutor support ends. Students advised to finish up their work and submit
9:00 pm	Final deadline for all submitted work

Table 1:Hackathon Schedule

Preparing for the Hackathon

Make sure you are up to date on all of your lab work. The hackathon task will be quite similar to some of the lab exercises you have been working on throughout the term. You may wish to revisit the lab work, perhaps making some paper notes or code comments to help you understand your previous work if you need to look back through it when doing something similar.

Many of the techniques that you will need for the hackathon have been covered in lectures this term, so it may be worth re-familiarising yourself with the lecture content. You will still have access to all of the information on Moodle on the day, so this does not need to be anywhere near as rigorous as revision for an exam, but a little extra reading would better prepare you for the assessment.

On The Day

I would recommend that you complete the Hackathon assessment in the University, rather than at home. This will make it considerably easier to contact your tutors if you wish to ask them questions, and help prevent distractions at home from affecting your work. Your tutors will be available in C0.13 for most of the day, and you're welcome to work in this lab if you wish, but some may prefer to work in another lab where it will be quieter. We have also booked C0.17, to make sure that is free.

It would be a good idea to bring one or two bottles of water (or another drink, if you prefer) and some snacks to help you perform evenly throughout the day. It may be worth getting lunch from somewhere near campus on the day, so that you get out of the building and stretch your legs without losing too much time travelling there and back. You should take breaks throughout the day to clear your mind, minimise stress and to avoid fatigue and eye strain.

You should spend some time at the start of the day to digest the assignment specification, talk about it with your friends and tutors, and plan your work. Try to identify features that you wish to prioritise, and those which you'll work on if time allows. Look back at your lab work to understand where you have worked on similar tasks previously. This could easily take 30-60 minutes, so avoid the temptation to jump straight in without a plan, even if others around you get started more quickly than you.

You should back your work up throughout the day, such that if you make a major error when working on one of the later features you can roll back to an earlier version easily, and submit the earlier work if need be.

Plagiarism and Duplication of Material

I, the Faculty, and the University all take academic malpractice very seriously. The work you submit for this assignment must be your own, completed without any significant assistance from others. Be particularly careful when helping friends to avoid them producing work similar to your own. I will be running all submitted work through an automated plagiarism checker, and I am generally vigilant when marking. The penalties for academic malpractice can be severe. Please refer to the guidance at http://www.celt.mmu.ac.uk/plagiarism/ for further information.