

## School of Computer Science – Coursework Issue Sheet

<b>Session</b>	19/20	<b>Semester</b>	Autumn
<b>Module Name</b>	Software Maintenance	<b>Code</b>	COMP2042
<b>Module Convenor(s) (CW Convenor in Bold)</b>	<b>Dr Marina Ng</b> Dr Puteri Nor Ellyza binti Nohuddin		

<b>Coursework Name</b>	Maintaining and evolving existing software	<b>Weight</b>	50%
<b>Deliverable</b>	Git activity Code additions and changes		
<b>Format</b>	Final code should be on both: <ol style="list-style-type: none"> <li>1. The CS git server github.com (add Dr Puteri to your team in Github)</li> <li>2. Additionally, zipped and submitted on Moodle (for record keeping)</li> </ol> <p><b>You should also compile your standalone map viewer application into a .jar file and put this binary file in a /bin folder in your project (on git and Moodle).</b></p>		

<b>Issue Date</b>	Issued 11 November 2019
<b>Submission Date</b>	12 December 2019
<b>Submission Mechanism</b>	On both Moodle and git (same code submitted both places)
<b>Late Policy (University of Nottingham default will apply, if blank)</b>	Standard policy
<b>Feedback Date</b>	15 January 20
<b>Feedback Mechanism</b>	Group feedback via Moodle.

<p><b>Instructions</b></p>	<p>You are part of a development team who are tasked with making some changes and additions to the <b>DiamondHunter</b> game.</p> <p>Your tasks are as follows:</p> <ol style="list-style-type: none"> <li>1. <b>Fork the DiamondHunter project</b> on our local GitLab (Github) so that you have your own copy in your own git workspace. For this you have to <b>paste your workspace</b> into your github repository online.</li> </ol> <p>This is the original game code (do not use the code from Coursework 1). Fork this (press Fork) so you have your own copy in git, on GitLab.</p> <p><b>Now prevent others seeing your project.</b> Edit your project (click the cog icon, and then Edit Project) and make it private by selecting this and saving:</p> <div data-bbox="534 712 697 743" data-label="Text"> <p>Visibility Level (?)</p> </div> <div data-bbox="534 759 670 792" data-label="Image"> </div> <div data-bbox="601 792 1062 824" data-label="Text"> <p>Project access must be granted explicitly to each user.</p> </div> <p>You know your project is hidden (private) when you have this padlock next to your project name:</p> <div data-bbox="649 994 732 1075" data-label="Image"> </div> <p>Any changes you make will need to be pushed regularly to your own copy of the game in your own area – your use of git will be assessed.</p> <p><b>*Note:</b> Add me as a user. So I can view your codes and mark you.</p> <ol style="list-style-type: none"> <li>2. Your boss would like you to add a viewer for the map files for the game, and use this to set positions of the axe and the boat in the game (see PlayState.java to see how this code is used). So you need to:       <ol style="list-style-type: none"> <li>a. <b>Make a stand-alone map viewer application.</b> You need to make a JavaFX application which is able to load the map file, and display the map using the tile graphics from Resources/Tileset. In the Resources/Maps folder you will find a representation of the map in the game. This is stored as text, with different numbers representing different graphic tiles in the game. Unfortunately no further documentation is available.           <ol style="list-style-type: none"> <li>i. You can achieve this whichever way you like, as long as the application works</li> <li>ii. More marks will be awarded for more elegant and well-thought-out solutions, demonstrating good programming practice.</li> </ol> </li> <li>b. <b>Use the new viewer to set the position of the axe and the boat in the game.</b> Your boss would like to somehow set locations in the new map viewer app for the boat and the axe items, and use these coordinates in the game to position these items initially.           <ol style="list-style-type: none"> <li>i. How to best achieve this is your decision.</li> <li>ii. See PlayState.java to see how this currently works.</li> <li>iii. At its most basic, you can save the coordinates in a file, and use this in the main game code to set the parameters</li> </ol> </li> </ol> </li> </ol>
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	<p>iv. It is up to you as developers to work out how to add to and change the existing code to do this</p> <p>v. More marks will be awarded for more elegant and well-thought-out solutions demonstrating good programming practice.</p> <p>c. <b>Use git</b> to version your changes regularly, using suitable commit messages, etc.</p>
<b>Assessment criteria</b>	<p>There are different components to this which together will make up 50% of the module mark. The breakdown is as follows:</p> <p><b>20% Use of git.</b> Including, successful forking/cloning of the original code. Regular commits to the server, and meaningful commit messages.</p> <p><b>50% The implementation and design of the standalone map viewer application</b> (and associated GUI) written using JavaFX.</p> <p><b>30% Implementation of the axe and boat location-setting features</b> in the viewer, and the communication of these features to the main program.</p> <p>In all cases good programming practice and advanced design and programming concepts will gain higher marks. Nicely presented and easy to use interfaces will be rewarded.</p> <p>A proportion of the marks will depend on you supplying a working JAR file to run your viewer. (see Format box above)</p>