# ECS414U/A Miniproject form

Queen Mary University of London

2021/22

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| Name | Duy Chinh Dinh |
| Student ID | 200987525 |
| Submitted file name | DuyChinhDinh\_200987525.zip |
| Level of this program (1, 2, 3, Extra) | 3 |

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| Brief description of the program. Write the chosen theme and a high-level overview of the features (two or three sentences should suffice). |
| An investment trading app, which allows the user to deposit and withdraw money to the portfolio. In addition, the user can view the market to see what type of assets is available, as well as to buy and sell securities (including stocks, bonds and real estate). |

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| List all your source code files, and briefly describe their roles. Add as many rows as necessary. Mark the main file used for compilation in bold. | |
| File name | Description |
| **MainApp.java** | The main file to run the trading investment app. |
| Agent.java | The file that contains the information about the investment market, as well as methods to buy and sell securities. |
| User.java  Account.java | The files that have the information about the user’s portfolio, as well as methods to change some attributes related to its securities. |
| Prompt.java  WindowCloser.java | The files that include the functions related to the GUI. |
| Asset.java  AssetInterface.java  Bond.java  RealEstate.java  Stock.java | The files that contains the information about the types of assets using in this program. |

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| Class diagram, in the format specified in the instructions. |
| AssetInterface  Asset  MainApp  User  Stock  RealEstate    Account  Agent  Bond |

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| Usage instructions. Describe briefly what features are available to the user and how to use them. If File I/O is used, list and describe the files involved. |
| This program can be used to view the user’s portfolio by the button “View Portfolio”, which contains the amount of money in the account, as well as the securities of the user. The user can manipulate the account by the “Deposit” button and “Withdraw” button. The user can view the market to see the available asset by clicking on the “View Market” button, which will show the user the information of three different types of asset: Stocks, Bonds and Real Estate. The user can buy and store the Shares, which includes Stocks and Bonds by the button “Buy Shares (Stocks/Bonds)”. The user will have to fill in the boxes with Stock name/symbol or Bond name, as well as the number of units the user wants to buy, followed by the “Submit” button. In contrast, the user can sell the Shares by clicking on the “Sell Shares (Stocks/Bonds) with the same process, without the function of entering the Share’s symbol to sell the shares. Finally, the user can buy/sell the real estate asset by the button “Buy Real Estate” or “Sell Real Estate”, following the asset name in the required box. After that, the user can view the portfolio as well as the market for further investments. |

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| Other comments. |
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