

# ECS414U/A Miniproject form

Queen Mary University of London

2021/22

Name	Rachel Solu
Student ID	210814424
Submitted file name	OOP_MiniProject.zip
Level of this program (1, 2, 3, Extra)	Extra

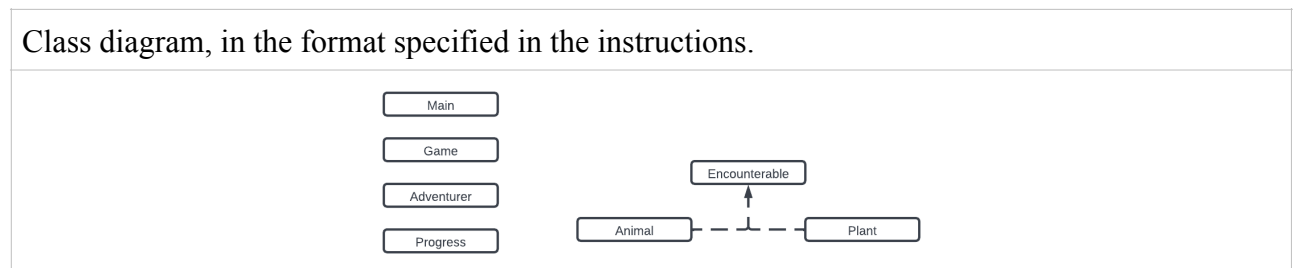
Brief description of the program. Write the chosen theme and a high-level overview of the features (two or three sentences should suffice).

An adventure game. This is a text based adventure game based around exploring a forest and healing animals with a progress saving/loading feature

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
Main	Creates an instance of Game. The Game() constructor runs the game
Game	Holds the gameplay methods and creates instances of Adventurer and the two Encounterable classes. All gameplay and helper methods are private for encapsulation. The game should only be started through the constructor. The default constructor starts a new game, the second constructor loads a game save, continuing the game from there.
Adventurer	Class for the character that the user will play. Holds their name, health points and healing points. Contains an override toString() method to better format the Adventurer's details when printed to the console.
Encounterable	Abstract class that's inherited by Animal and Plant. Contains the name field and getter as these are used by both subclasses. Also contains a randomNumber method as both fields use these to create new objects.
Animal	Class that inherits Encounterable. Contains three attributes of name, healthPoints and injuryPoints. Has two constructors, the default constructor which creates a random animal object and a second which creates an animal with assigned attributes.

Plant	Class that inherits Encounterable. Contains three attributes of name, healingPoints and poisonous. Has two constructors, the default constructor which creates a random plant object with a 1/4 chance of being poisonous and a second which creates an animal with assigned attributes.
Progress	Class that holds the methods needed to save game progress and load a new save. Contains attributes of an Adventurer object, the level and stage, a map of Animals and Plants and the file progress is read/written, stored as a File object. A game is save is a consistent format, this makes it easier for the class to be able to read a game save too.



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.

At all times the user only needs to enter one character to play the game  
 When the game starts the user has to enter either 'N' to start a new game or 'S' to load a save  
 If a save is loaded, the user has to enter the number of which save they wish to load.  
 If a new game is started the user is asked to enter the name of their adventurer  
 When the game begins at any time the user can enter 'S' to save their game at that stage  
 When an encounterable object is found, the user can enter 'Y' to heal/eat or 'N' to avoid

Other comments.