

Assessment event 3

Criteria

Unit code and name

ICTICT449 - Use version control systems in development environments

ICTPRG430 - Apply introductory object-oriented language skills

ICTPRG441 - Apply skills in object-oriented design

Qualification/Course code and name

ICT40120 CERT IV in Information Technology Game Development

Student details

Student name

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Student number

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Version: 20221220
Date created: 20 December 2022

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RTO Provider Number 90003 | CRICOS Provider Code: 00591E

This assessment can be found in the TAFE NSW [Learning Bank](#).

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Assessment instructions

Table Assessment instructions

Assessment details	Instructions
Assessment event overview	<p>The objective of this assessment is to assess your skills and knowledge required to use version control systems to track content, versions and maintain a code repository of work when developing in an ICT environment.</p> <p>Introductory programming tasks using an object-oriented programming language including tool usage, documentation, debugging, and testing techniques.</p> <p>Produce an object-oriented design from specifications, applying the cyclic process of iteration from identification of class, instance, role and type to the final object-oriented model of the application.</p> <p>This assessment is in 3 parts:</p> <p>Part 1: UML</p> <p>Part 2: High-score</p> <p>Part 3: Testing</p>
Unit assessment guide	<p>Refer to the unit assessment guide (UAG) before attempting this assessment event. The UAG contains information including assessment requirements and how to achieve a satisfactory result.</p>
Submission instructions	<p>When you complete this assessment:</p> <p>read the checklist at the end of the assessment to make sure you have completed everything</p> <p>keep a copy of all the electronic and hardcopy assessments you submit to TAFE NSW</p> <p>make sure you have completed the assessment declaration before you submit.</p>

Task instructions

The assessor will use the criteria outlined in the following tasks to determine if you have satisfactorily completed this assessment event. Follow these instructions to ensure you demonstrate the required knowledge and skills.

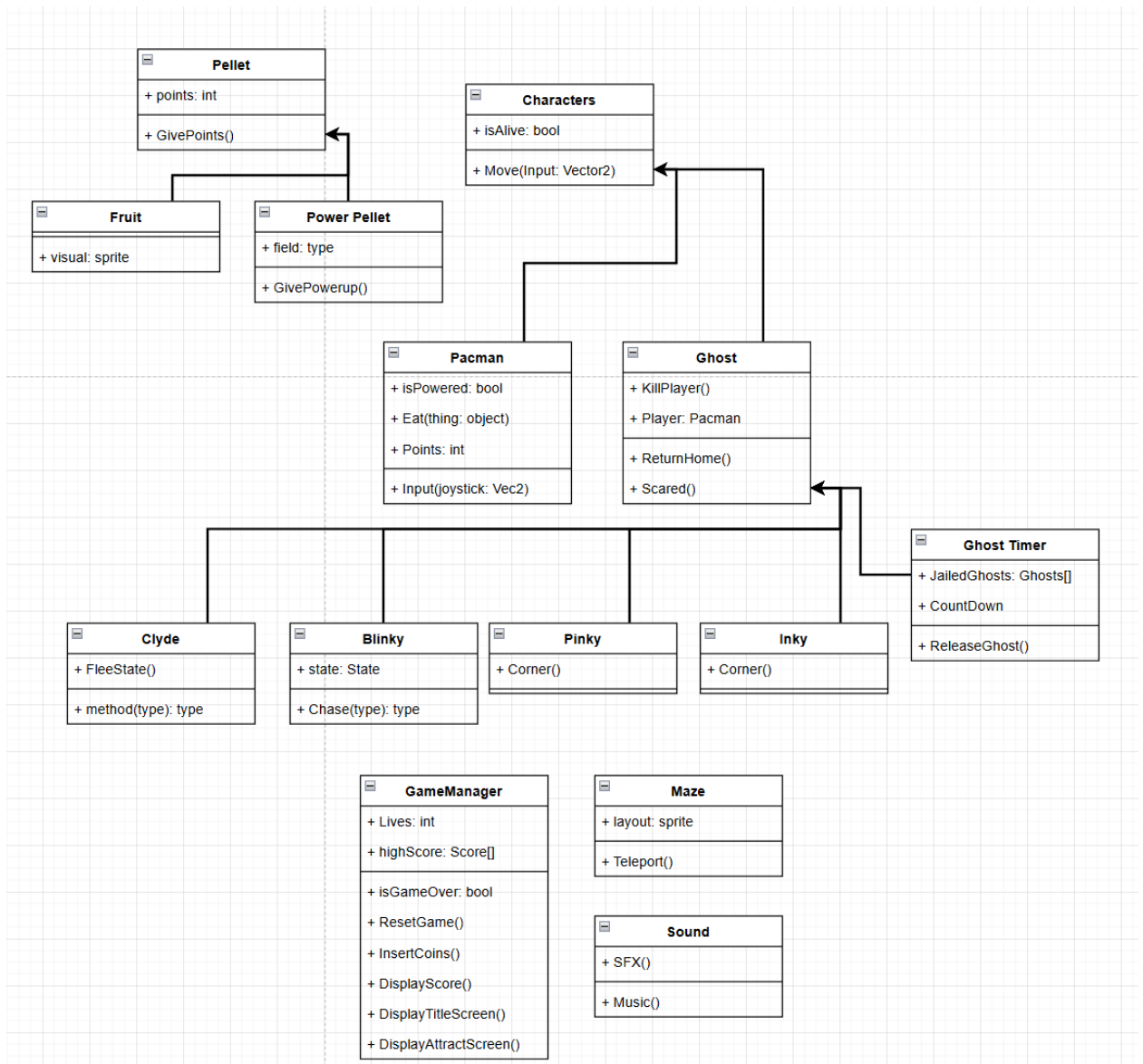
Part 1: Classic game revival UML

1. You are asked to choose a classic video game.

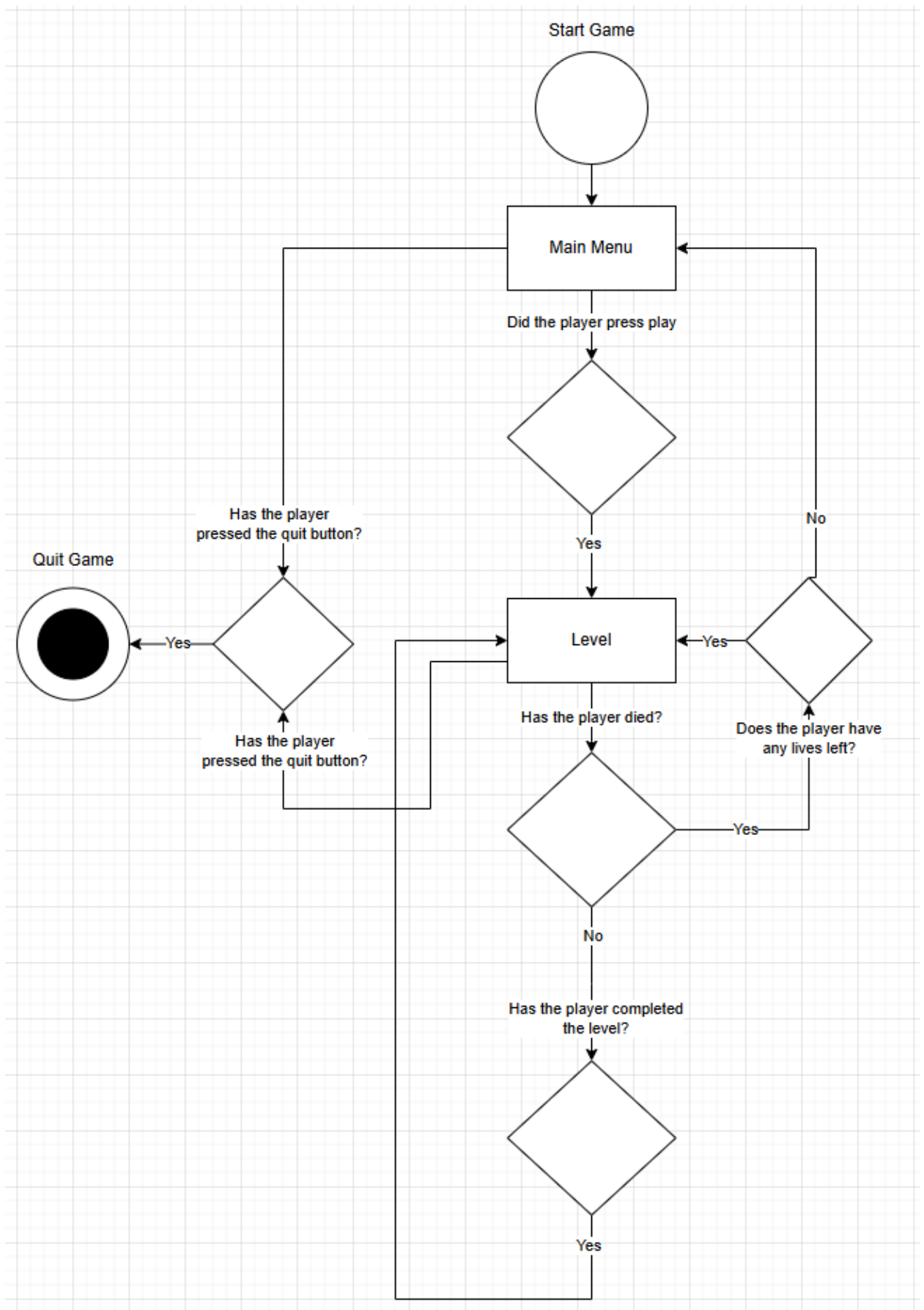
Think about and investigate how you think your chosen classic game code was structured. Write the following UML (Unified Modelling Language) diagrams about your classic game.

- a. Class Diagram.
 - i. Ensure you have included access modifiers.
 - b. Communication Diagram.
 - c. Sequence Diagram.
 - d. Activity Diagram.
 - e. State Diagram.
2. Think about how you could improve on the game, what features could you easily add to make the game more fun.
 - I decided my addition to the game would be adding a 2nd map layout, so I had to update the Class Diagram, Activity Diagram and State Diagram
 3. What are generalisations and/or specialisations (Inheritance) exists within your game. If there are none, what could you add that would include these features.

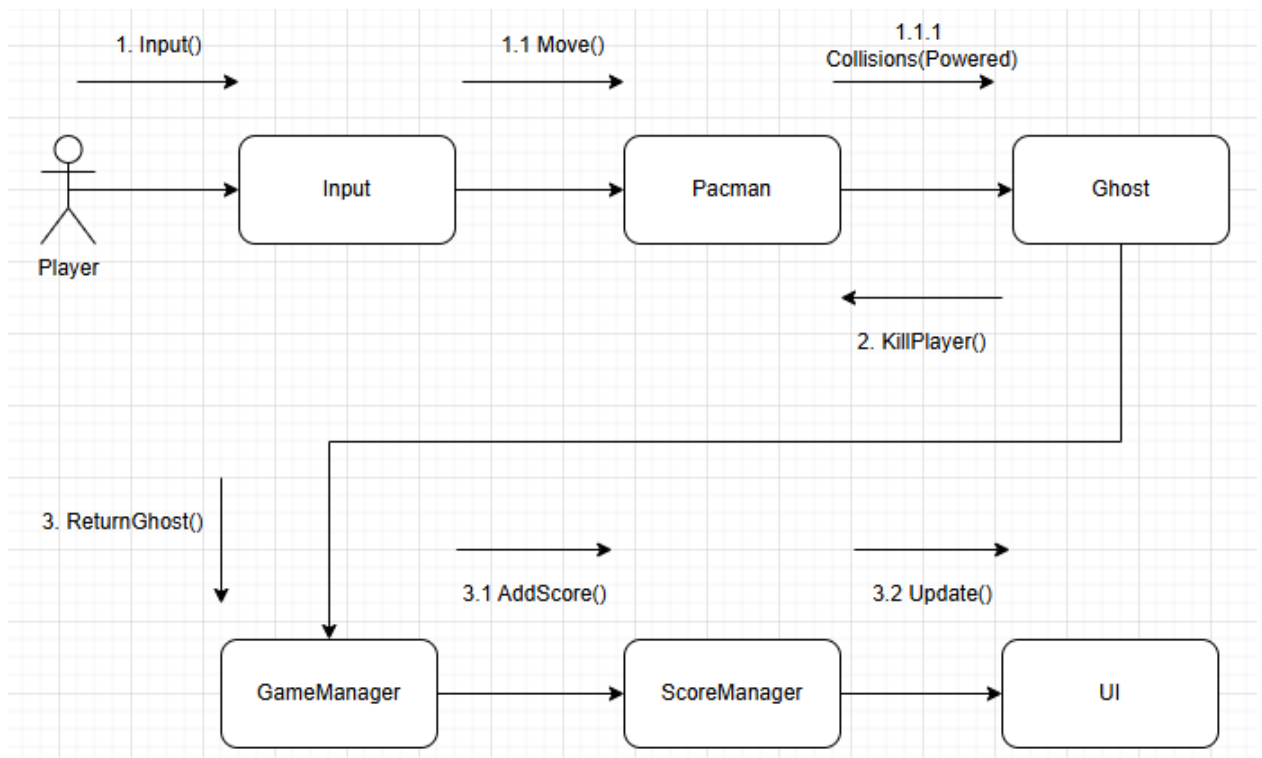
Class Diagram



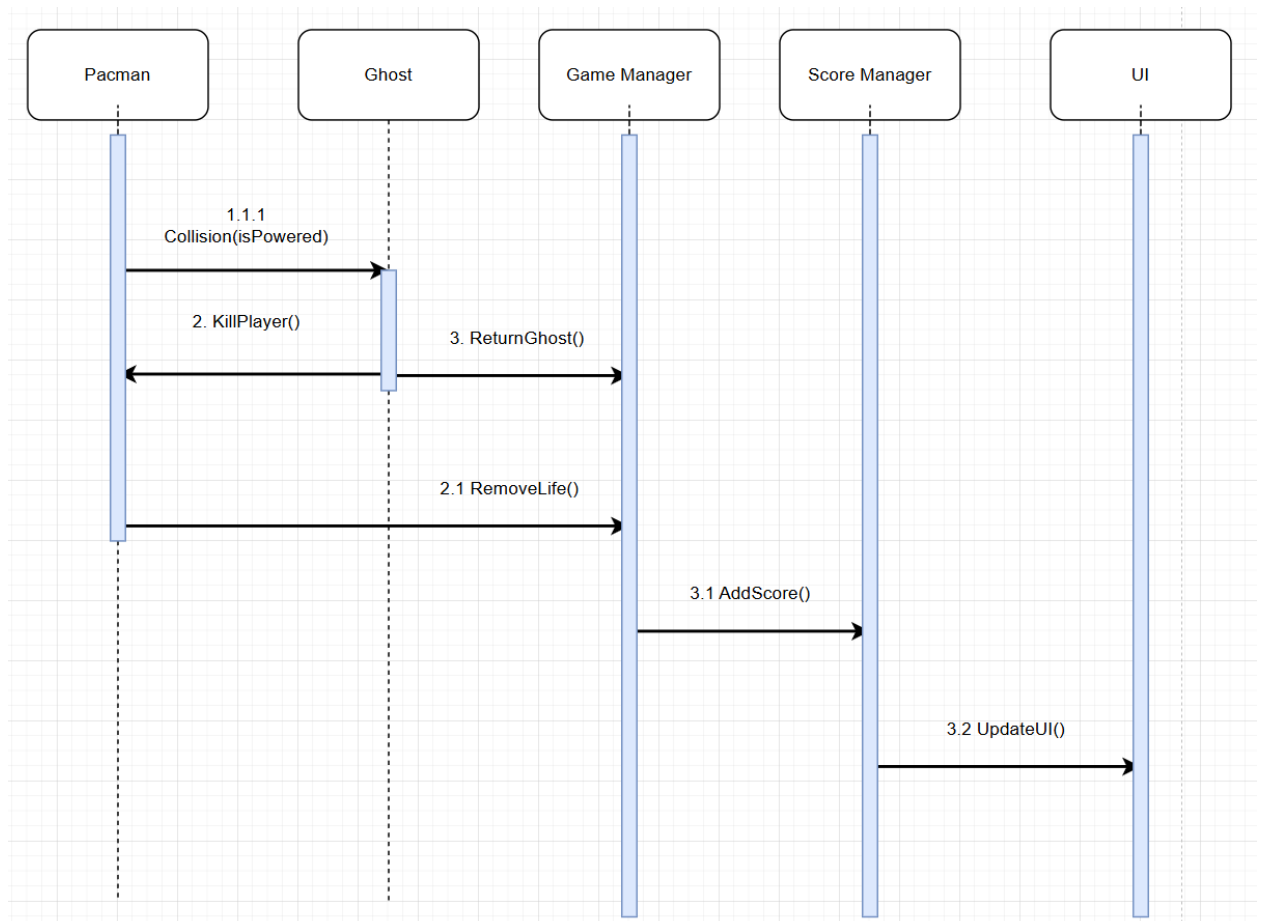
Activity Diagram



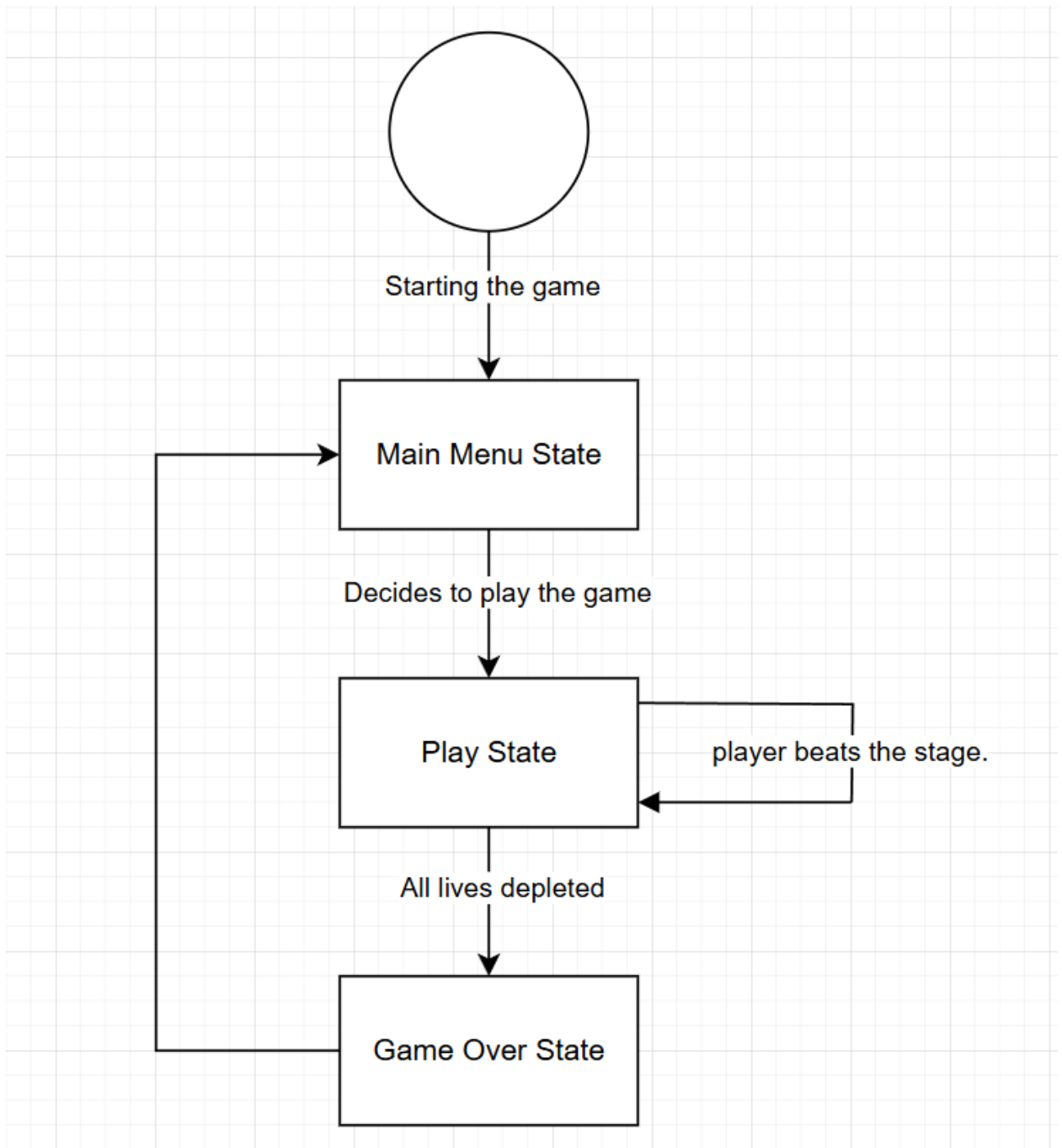
Communication Diagram



Sequence Diagram

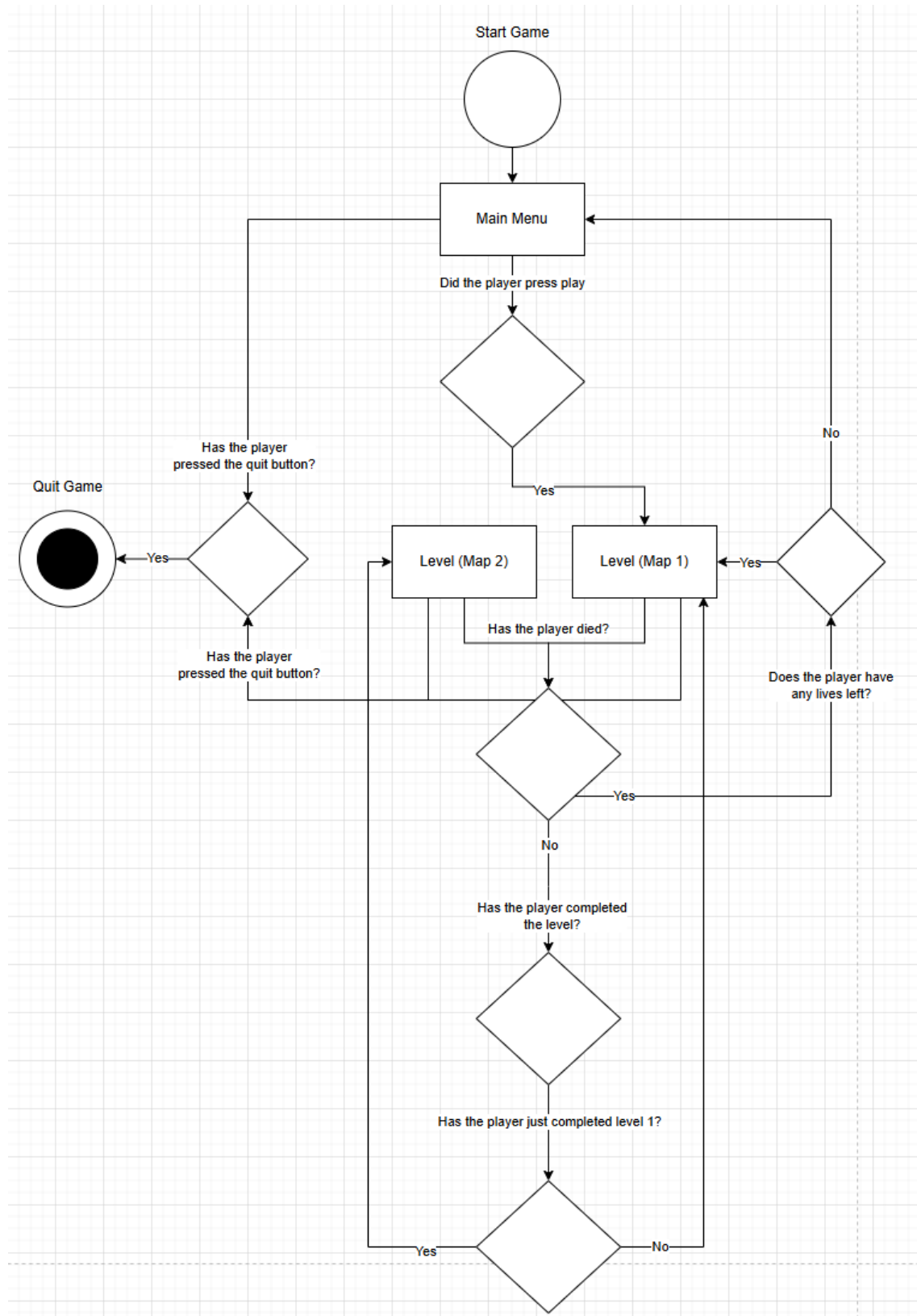


State Diagram

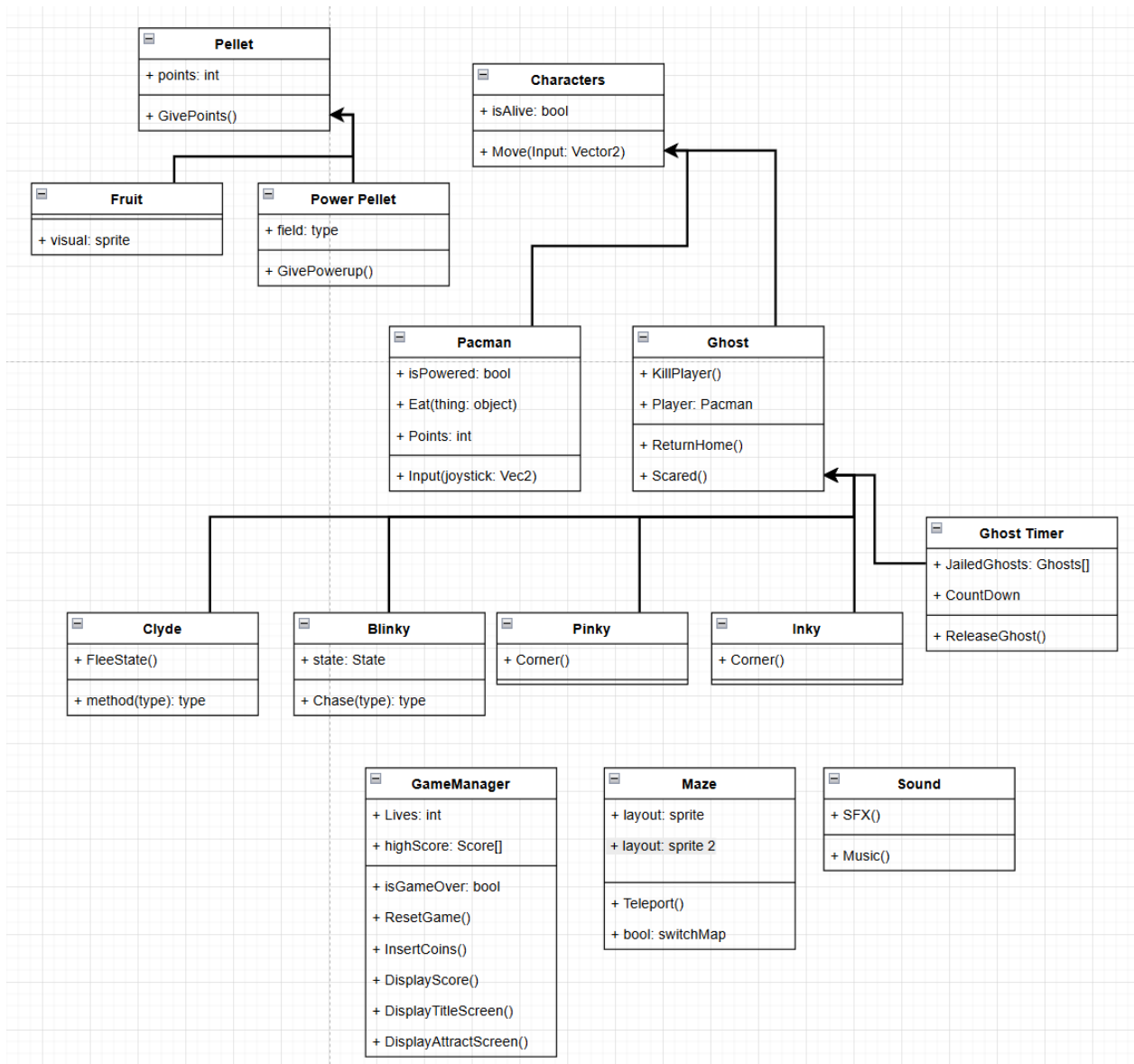


Updated Diagrams

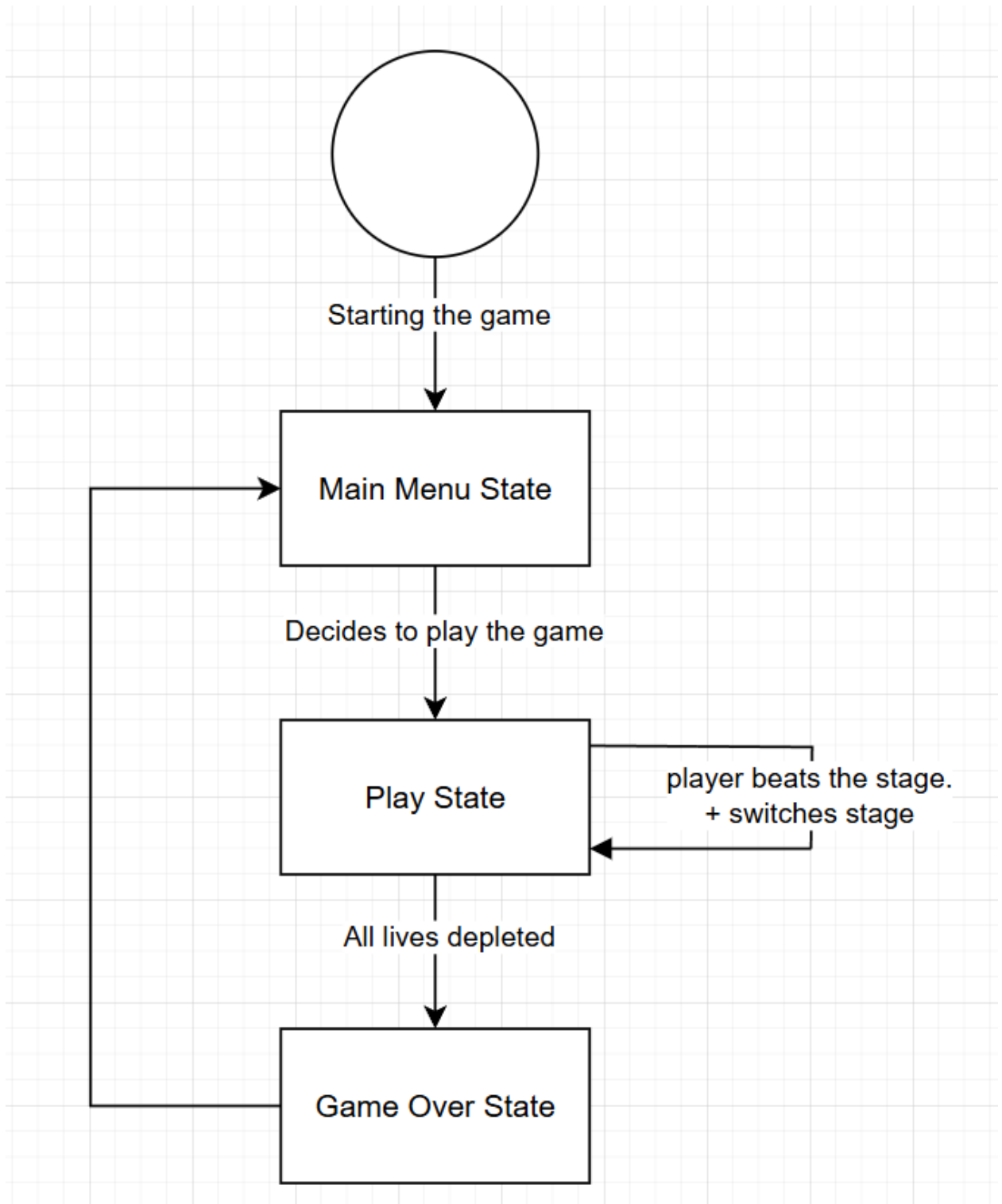
Updated Activity Diagram



Updated Class Diagram



Updated State Diagram



Submission

Ensure all requirements have been met in your project.

On submission your project will be reviewed, if any changes are required, you will be provided feedback.

Ensure you have submitted the following

1. Documentation as a .pdf
2. A build in a .zip (include all files in the build folder)
3. A copy of your code as a .zip
4. A copy of your code on github (make sure its public)