

Team Edward Final Project Report

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Includes

- UML Class Diagram
- UML Sequence Diagram
- Use Cases
- Questions 1 - 4

Questions

1: Which materials from this course did you apply on the project?

For this project we used Java inheritance and interface implementation for our `MancalaGUI` class, Java inheritance for our `Board` class, Java abstract class definition and implementation for our `BoardLayout` `ClassicLayout` and `OMGPoniesLayout`. As well as anonymous classes and inheritance in `MDialog` and basics of the Swing and awt graphics libraries.

2: Which materials from prerequisite courses did you apply to the project?

We used Java fundamentals such as class and method definition as well as elementary data structures such as multidimensional arrays throughout

3: Which topics did you have to learn through self-study in order to complete the project?

Advanced Swing and awt library foundation classes such as `JDialog`, `Image` and `ImageIO`. We also took advantage of the source code management (SCM) tool Mercurial and bitbucket.org project hosting as well as use of the Inkscape vector graphics program.

4: Which key concepts of this course did you use in conducting this project?

This project made heavy use of the MVC pattern. Our data model was contained in the `Mancala` class, we used the `Board` class as our view to display the game state and the `MancalaGUI` class handled interaction between them. Thus the Model and View were completely orthogonal and had no dependency between them. We also used the Strategy pattern with our abstract class `BoardLayout` and its two instantiations `ClassicLayout` and `OMGPoniesLayout` to provide slightly different looks for our `Board`.