

# Software Engineering Coursework

## Design and Implementation of Multiplayer Othello

Michal Srb and Thomas Rooney

December 2, 2012

### 1 Introduction

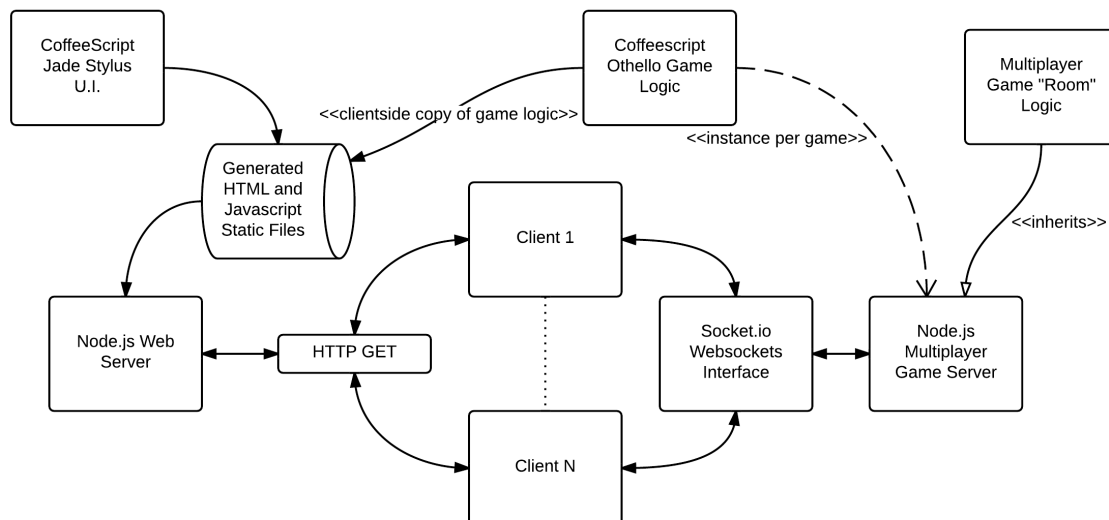
The task that we have been given is to design and implement a computer-based version of Othello, that is playable between at least two human players.

To implement this, we have decided to leverage web technologies to build a webpage, that when loaded, provides the player with a UI for a multiplayer lobby, through which the players can challenge one another and play a game of Reversi.

To focus our design efforts, we decided to utilise the Test Driven Development style through the following workflow:

1. Writing Calling Code
2. Write a shell implementation of the feature, just enough such that it compiles
3. Use Test Driven Development:- writing tests for the feature using the methods defined above; defining the methods such that tests pass ...
4. End up with finished, and tested feature

In designing each component, we also attempted to adhere to **Object Oriented** principles, whereby the number of public methods in each class is minimized to the bare requirement of the features that are inherently necessary to the functionality of the object. This leads to a clean, and simple design.



## 2 Designing the Othello Game

3 ...

## 4 Designing the User Interface and Networking

5 ...

## 6 Conclusion