To: Dot Game CEOs

From: Joseph Mullally and Mark Preschern

Subject: Milestone Identification

Date: 9/23/20

In developing the game Fish, we propose a sequence of milestones to be completed and demonstrated. These Milestones include developing the model, view, and finally the controller of the Fish game in that order.

The first task is to model the data that comprises the Fish game. This can be broken down into several components: The game board, tiles, players, and penguins. These 4 components, which will be split up into distinct classes, work together to deliver several key functionalities of the game. These functionalities include setting up a N by M board (as specified by the user as program arguments), allowing players to choose where to place their penguins, allowing players to move their penguins to new tiles, and updating the tiles on the game board appropriately. Additionally, we will include a method that prints out the game board to STDOUT to give an initial visual representation of the game.

The second task is to make the Fish game's view. The graphical user interface will display all components of the model in an intuitive way for users to visually see. More specifically, the view will (for the time being) have a reference to the model and will graphically represent the model which is passed to it. Additionally, the view will detect user mouse clicks which will be useful for the next milestone to pass information to the controller. We will run our view on several different N by M boards to demonstrate the game's visual capabilities.

The final task is to make a controller. The controller will first allow a referee to set up the board to their liking before the game begins. It will then dictate which player's turn it is to initially place their penguins and then move their penguins. In order to achieve this, the controller will pass information back and forth between the model and view, updating both based on user input. At this stage, the Fish game will be fully functional and user's will be able to play the game as they are intended to.