

Project1 Team Design Paradigm-

Group 6's project 1 was based on Function-Oriented Design. They wrote the entire Javascript code in one file and each code block was broken up by a new function. A function-oriented approach for this kind of program is useful since there were requirements for game functionality in project 1. However, a drawback to this way of programming is that some functions may end up being responsible for too many tasks which makes implementation of new features more difficult. With the project we were given this was the case. Some functions would be responsible for multiple features at once which made the AI implementation a little more challenging. If there had been a 'player' class for the game then it would have been easier to implement the new player types. The code we inherited had a nice format for documenting the main functionality of each function, which also makes it easier to recognize that they utilized function-oriented programming. Before the functions were written, variables were initialized so they could then be used later on in the program. A nice feature of function-oriented programming is that you can treat functions like other data types and it can be passed in other functions argument calls. Group 6 utilized this feature by creating smaller functions that would later be used in a larger function, an example would be the placeShips function calling the isSize, isOrthogonal, isWithinBounds, and isOnEmpty functions. When using function-oriented design it is important that the functions all have a specific purpose and that they are not responsible for too many requirements because that can lead to errors and more difficulty when expanding the original design.