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My XP value is courage. Our team divided our individual modules and had a follow up meeting later on. Since, it’s a starting phase of the project, we are keen on exploring different technologies and algorithms so that after some time, we can discuss and find out the best technology and algorithm for the project.

Different types of algorithm algorithms were chosen as following and analyzed focusing on their time and space complexities.

1. Bubble sort. Here, each element is compared with other elements on the basis of one-to-one comparison. Time complexity is O(n^2).
2. Selection sort. Smallest unsorted item is selected and swapped in such a way that it is swapped with the element in the very next position. Time complexity is O(n^2).
3. Insertion Sort. It means an element is removed from its original position and insert it into the position of correct order. Time complexity is O(n^2).
4. Quick sort. It’s a divide and conquer algorithm which divides a large data set into small data sets which are then sorted accordingly. Time complexity is O(n log n). Worst case time complexity is O(n^2).
5. Merge Sort. It follows divide and conquer approach. Here, first of all the given dataset is divided to the smallest elements, then sort is performed on them individually and then the sorted elements are merged in sorting way. Time complexity is O(n log n).

There will be different levels of our games in which we will teach the players of this game about different sorting algorithms.

Side by side, Unity was understood and its prospective for using it as medium for programming our project was analyzed. With Unity, 2D and 3D games can be effectively created.

A sample application was developed to get a look and feel of it.