**Solution Document**

* The challenge was to create salad-chef simulation, along with “couch co-op” in which two player can play at the same time.
* The basic gameplay is that the chef has to collect vegetables from both the sides of the table, put it on the chopping table and create salad out of the combination as requested by the customer.

**DATA**

* There are total 6 vegetables, 3 on the either side of the table.
* 4 customer requesting combination of 2 or 3 vegetables.
* 2 chopping boards each for chef
* 2 storing plates for each chef
* 1 common dustbin
* 2 players (Chef 1 - red color, Chef 2 - blue color)

**CONTROLS**

* WASD is the movement keys for the Chef 1
* Left SHIFT for picking up objects and Left CTRL for dropping objects
* IJKL is the movement keys for the Chef 2
* Right SHIFT for picking up objects and Right CTRL for dropping objects

**GAMEPLAY**

* The game works on 2D physics. The triggers will be OnColliderStay and OnColliderExit. The chefs has to go near the objects and press ‘shift’ to collect vegetable and ‘ctr’ to drop vegetable on plate, chopping board, serve to customer and dustbin.
* The customer is spawned with a random amount of time depending on the number of vegetables that is requested in the salad.
* Both chefs will have specific amount of time to serve the customers.
* Once the timer runs out on the customer a new customer is spawned at its place
* If the customer is served correct order, the chef is awarded the point and a new customer takes its place. If the chef serves incorrect order the wait time for the customer decreases rapidly and if the customer is not served correct order a penalty is given to the chef who served the incorrect order
* If the customer is not served at all, some points are deducted from both the chefs score..
* After the time runs out, the chef with the highest score will win, The leaderboard with the top 10 high scores will be displayed along with it.

**SCORING**

* For every correct order the chef is awarded 20 + the remaining time, the customer has
* If the chef serves incorrect order, and the time runs out, a penalty of 10 points is given to the specific chef who served the incorrect order.
* If the customer is not served at all, 5 points are deducted from both the chefs score

**PENDING TASK**

* The bonus system is yet to be implemented
* The idea was to have a 3 seperate class for all 3 bonuses which will be inherited from a base class of bonus.
* It will have a tag which will be decide which bonus can be collected by which chef
* The SPEED bonus can increase the speed variable in the PlayerController class which will increase the movement speed of the chef.
* The SCORE bonus can add extra score to the total score present in the ChefManager class.
* The TIME bonus can add the total time allotted to individual chef under the TimeandScore class.
* A delegate will be defined on the object script which will call an event that can apply the type of bonus the chef will pick up
* All the bonus will be seperate prefabs which can be instantiated randomly when the chefs delivers the order before 70% of the customer wait time.