| **WBS ID** | **Task Name** | **Description** | **Assigned To** | **Duration** | **Dependencies** |
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| 4.1.1 | Plan the implementation of social media part | We want to implement a social media feature to the app to allow users to share their meals and interact with each other. Users need to be able to make posts, comments, etc. | Lebron James | 1 Day | N/A |
| 4.1.2 | Create GitHub Repo’s | We need a repository in order to collectively work on the project. The Team Leader should be the one making this and sharing it with everyone. | Stephen Curry | 2 Days | N/A |
| 4.1.3 | Set up a proper environment for development | We need to choose our techstack and decide what tools and software are necessary for development. | James Harden | 5 Days | N/A |
| 4.2.1 | Construct a dataset with types of food | To help create and improve our food recognition model, we need datasets to train the model. This can come from many sources. But the point is to have different pictures of a lot of food to help train food recognition. | Nikola Jokic | 10 Days | N/A |
| 4.2.2 | Construct a food recognition model using a CNN | The core feature of the app is to be able to analyze a meal and identify its calories and nutrient profile. In order to do this, it is crucial we have a food recognition model. We plan on making the model using a CNN. | Kevin Durant | 4 Days | 4.2.1 |
| 4.2.3 | Train the model to be able to recognize the food | Train the model to better recognize food with the given datasets. The better the model gets, the more accurate it is. We might also have to get more datasets if needed. | Kevin Durant | 7 Days | 4.2.2 |
| 4.2.4 | Test the model | We test the model in order to see how well it works. Ideally we try to test its recognition of simpler foods alongside more complex foods. There is also to take into account foods from different cultures. | James Harden | 10 Days | 4.2.3 |
| 4.2.5 | Implement the food recognition model | Once the above tasks are complete, we can finally implement everything into a deliverable. Our food recognition model would be fully trained and ready to be implemented with the rest of the project. Model should be able to recognize food at this point. | Stephen Curry | 4 Days | 4.2.4 |
| 4.3.1 | Integrate database with the food recognition model | We will integrate a database into the food recognition model. There needs to be a place to store the learning dataset and the model itself as well as any new information learned needs to be stored somehow. | Lebron James | 5 Days | 4.2.5 |
| 4.3.2 | Construct a system where the user can image scan a meal | We will need to implement a picture taking feature. Or we can implement a picture scanning feature too. With the goal of having a way for the user to provide a picture input to our app which is then given to our food model to identify. | James Harden | 3 Days | 4.2.5 |
| 4.3.3 | Implement a feature that can recognize public meals | We will need a way to recognize meals served at restaurants. These meals are typically more complex and harder to scan. Can’t be sure of all the ingredients used. Therefore meal recognition based on actual data is also important here. | Stephen Curry | 3 Days | 4.2.5 |
| 4.4.1 | Construct a safe and stronger user authentication | Users will need to have accounts. With accounts means the need for security. This means setting up an authentication structure as well as a user. | Nikola Jokic | 3 Days | 4.1.3 |
| 4.4.2 | Construct a profile management system | We will first need to make an account system for the user.  There will also need to be a profile picture and user data page.  Users should also have social media settings here. | Lebron James | 4 Days | 4.1.3 |
| 4.4.3 | Construct the data protection, encryption and security parts | Not only do we need to protect the data of our Users. We also need to protect our own data. The data and security of our app itself and its assets are important. We don’t want sensitive information leaking. So it is important to utilize encryption to have security. | Stephen Curry | 22 Days | 4.1.3 |
| 4.5.1 | Construct a system to track/count calories | We will need a way to total calories for every meal. We will also need a way to keep track of the total amount of calories per day. We also need to save this for every user. | Kevin Durant | 6 Days | 4.3.1 |
| 4.5.2 | Construct a system to macronutrients | We will need to be able to identify the macronutrient profiles per meal. We need to utilize existing food data and determine a reasonable answer given a match. We could even ask for more information from the user | Lebron James | 4 Days | 4.3.1 |
| 4.5.3 | Implement meal tracking functionality | Users should be able to keep track of all the meals they have eaten so far. There needs to be a meal history function. We will need to keep track of all meals already eaten or at least X most recent meals. | Nikola Jokic | 3 Days | 4.5.1 & 4.5.2 |
| 4.5.4 | Create a feature that recommends a meal to eat every week | We need to have a feature that can recommend meals. We need to make an algorithm to identify popular meals for different meal types and use that to recommend meals. It is also important to recommend meals that are less known in order to not recommend something commonly known. | Kevin Durant | 10 Days | 4.5.3 |
| 4.6.1 | Construct a payment plan for higher access to the app | We want to implement a subscription based app. In order to do so we will also need to implement payment methods. We need to decide the different possible plans for the app and what features are limited or unavailable when free. | James Harden | 5 Days | 4.4.3 |
| 4.6.2 | Build a notification system | We will need to make a notification system. This is so the app can send reminders or new suggestions to users that want them. | Kevin Durant | 14 Days | 4.4.3 |
| 4.6.3 | Create admin panel for managing users and meal | We will need an admin system to manage users and meals being posted. This will be part of quality control. It would also be good just to have a way to manage meals that are already part of the dataset. | Stephen Curry | 7 Days | 4.4.3 |
| 4.7.1 | Develop the mobile and app interface | We need an app interface to have a frontend Users can interact with. This will bring everything together and finalize all the features of this app. | James Harden | 24 Days | 4.2.5 |
| 4.8.1 | Implement the social media plan from task 1 | We need to implement the social media plan to see if everything works together. We need a social media section to post and comment. We need to be able to like posts and comments. We also need to have our meal recommendations working. All of this needs to be working together | Lebron James | 4 Days | 4.1.1 |
| 4.8.2 | Construct a system to involve users such as a point system | We need some sort of reward system or point system to create some incentive to interact with our app consistently. Things like login streaks or post viewer leaderboards or a simple point system all can work. Points can be gained from high user traffic to posts or comments. | Stephen Curry | 3 Days | 4.4.1 |