

Host: Jenna Byron

Question Askers: Ethan Fournier, Brandon Hosang, Nicole Wiszowaty

Note Takers: Yaqirah Rice, Siddhesh Mahadeshwar

- **Are we saving each student's score?**
 - Yes, maybe. There could be an advantage from a teacher's perspective, but it may add a whole level of complexity having to distinguish between students and their scores. For our purposes, we can leave off storing student scores. We can simply display the final score and leave it at that.
 - WALLACE: Yes, maybe. I can sorta see an advantage from a teacher perspective to record a student's progress but on the other hand it adds a whole level of complexity to distinguish between students and frankly for our purposes right now we can leave off scoring stores and just display a final score at the end and leave it at that.
- **Do we want to have a login system to allow users to return and continue from a point they might have left the game?**
 - We can leave this out for now and just keep it at gameplay. We would want to have some idea of progressing through levels. A login system could be implemented that can keep track of scores.
 - WALLACE: We do want to have some idea of progressing through levels. Let's have a login system that keeps track of scores.
- **What data will we be giving to the teachers and parents?**
 - Some notion of how the students did would be interesting. Could be interesting to know how long was spent working on a particular challenge. We can store data regarding nutritional costs, environmental costs, etc.
 - WALLACE: Some kind of notion of how they (the students) did. At this point it is a little under-defined, but it would be interesting to know how long they spent on a particular challenge and their final scores in terms of nutrition, cost, and environmental costs. So maybe those things as well as time spent.
 - **Dr. Pastel proposed we could implement a system where a student can print their results and then send them to their teacher. (With login as a stretch goal)**
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 - WALLACE: I think that there's plenty of ways to do it without a login system, that's a good way to put it as a stretch goal. If the game just shows the score at the end instead of saving or sending it anywhere that's fine.
- **How should the data be presented to teachers and parents?**
 - Email?
 - End screen summary (could go with email)? ***Pastel's recommendation***
 - Teacher/Parent Portal?
 - High score board?
 - Graphs, pie charts, histograms, box plots?

- Unsure about what we want to do with the data for now. A table of scores would be fine, nothing fancy.
 - WALLACE: We're not quite sure what we're going to do with the data, so I would be happy with just a table of scores, nothing fancy.
- How should the consumption data be presented? Each category shown or maybe a score to represent all categories?
 - (Answered previously?)
- Can you briefly go over the USSEIO Model and how to implement the spreadsheet/food items?
 - Holding off until we hear from Jessica (Didn't get meeting invite)
- Is there anything you would like us to add or change with this mockup?
 - [Show mockup made by Jenna]
 - We could want to have the aisles to be themed so we can go to them based the themes. Looks good, along the lines of what we are looking for. When an item is selected, it would be nice to have the picture of it as well as more detailed info about the item. For eg. lettuce → weight, nutrition, cost, etc. A head of lettuce vs. packaged lettuce will have a big difference in terms of environmental costs. We will want to give the details to the player very clearly. There can be significant differences between a head of lettuce vs. a packet of lettuce.
 - WALLACE: I like it, but apart from the aisle being spelled as isle it looks good. I think we'd probably want the aisles to be themed, such as a vegetable aisle, dairy aisle, etc. That looks nice, definitely along the lines of what we're looking for. One point about that is when you select an item, we want it to show more detail about the item other than just the picture. For example when a head of lettuce is selected and weighed at the checkout it's different from pre-packaged lettuce, these details matter as there's a difference between these types of lettuce in environmental costs. So we want the details to be clearly displayed to the player.
- Do you have any more ideas for levels and scoring?
 - Start with a single nutrition category, try to minimize the environmental costs. Next time around, we can try to satisfy more nutritional categories. On each level, we can have the students try to meet more environmental goals. The idea of going from aisle to aisle is good. If everything would be in a single aisle on the first level, it could be good for navigation. Would adding more aisles and options make the game harder? It could make the game easier as well because there may be more ways to win. In some rounds, there could be multiple ways to win based on what items are available. We could approach the My Plate idea to have a optimal calorie intake, etc. This could be a good way to know what foods are good vs. bad for the kids. We need to make sure that a given challenge is obtainable; ensure that there is an actual solution for the problems presented. We can have a model selection to suggest for their shopping cart, then the challenge becomes about how close they can get to the model results. Can we create an algorithm that gives us optimal solutions for each level. It would be good to have a set number of levels with its details nailed down instead of having

to deal with optimization algorithms for a shopping cart. We can provide all the options and the targets for every level. That could be an answer to the question of leveling up as well. The provided data for each of the levels could have some tricky elements with some distinction for each level. A lettuce purchased in level 1 could have different impacts which need to be considered in a more restrictive environment.

- NICE TO HAVE: Allow a teacher to edit levels in some way, edit the items on the shelves. Show the model selection and give the students a target to get within an allowable range. (stretch goal)
- WALLACE: No additional ideas but interested in hearing ours. (After thinking on the options presented) Something along the lines of start with a level focusing on a single nutrition category, then the next time find something to satisfy three nutritional categories, something like that. Maybe increase the number of nutritional goals. I like the idea of going aisle to aisle. I suppose in the first version all the choices would be in a single aisle so you wouldn't have to navigate through multiple aisles, so it would make the first level simpler. If we had more aisles and more options, does it make the game harder? On one level it does because there's more things to look at, but it may also make it easier as there's more ways to win. For example, the first time around there's only one choice that works but the next time around with more options there could be five ways to win.
- (Presented the thought of adding more restrictions to the player as the level gets harder) (Elijah presented trying to stay within calorie ranges, as levels get harder players could need to find more stuff that's environmentally conscious.)
 - WALLACE: That's a good idea, it might force players to optimize. One thing we need to keep in mind is that when we give a challenge it must be attainable. Maybe a way to do that is some sort of model selection and then see how close the player can get to this model of really good results. To do this, can we create an algorithm that provides the optimal choice?
- Do you want levels to involve randomization or the same each time?
 - WALLACE: I would be happy if we just set up some scenarios, so pre-set. If randomized, it may require making an optimization algorithm which may be too much work for the scope of this project. This way we can provide all the options and the targets, that could be the way to go. This can also answer leveling up, we can add some more difficulties as we choose items to make the choice more difficult. No randomization would simplify things for creating the app. It would be nice to have a feature for teachers to create their own level, but this is a secondary goal as it may be beyond the scope. But this mode could allow teachers to plug in items on the shelves, targets, and the model selection. The challenge for the students will be to get within x% of the model (or better).
- **OPTION 1: Levels corresponding to consumption score? As the levels increase, the consumption must decrease and fit within certain bounds. Monetary cost could also be a factor as levels increase, sticking to a tighter budget.**

- OPTION 2: Levels corresponding to aisles? Each level is represented by a new aisle. Aisle could be by MyPlate Categories?
- OPTION 3: Have all the stats on the items so that they can learn quickly how they go.
- OPTION 4: Ask them to buy groceries for a meal and then let them know the things they did right and wrong at the end of the level, then enter into the full levels.
- Should we add more educational information/pages to the app?
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 - (Possibly pages before the gameplay and after the homescreen?)
 - This could be something to consider, some fun facts about household food consumption. No need to focus on an informational page, that does not need to be a focus for this semester.
 - WALLACE: I don't see why not, we could have some fun nutritional facts about household food consumption on a loading screen.
 - (Clarifying: Should we have a page with more information or should we leave it up to the teachers/parents)
 - WALLACE: Not necessary for the semester, we (the clients) will probably have that as supporting material outside of the game.