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CS495 - Intro to Human-Computer Interaction

Ideate: Concepts & Storyboards

Due 10/21/24

Part 1: Concepts

Blue = practical; Green = impractical; Red = magical

- 1. Reward shoppers with redeemable points in-app upon purchasing all list items in one go.
- 2. Virtual assistant compares ingredients with various brands and suggests alternatives.
- 3. Connect bank account to produce an essentials-only grocery list based on available funds.
- 4. Screens showing real-time store stats, like temperature, number of shoppers, popular items, etc..
- 5. Camera in pantry + fridge/freezer, connected to phone, lets shopper see what they forgot.
- 6. Seasonal produce tracker suggesting in-season items, like pumpkins in October.
- 7. Grocery list auto-sort based on store layout.
- 8. Nostalgia zone in-store with discontinued products from the past.
- 9. Community board sharing local recipe ideas based on entries from other shoppers.
- 10. Real-time price alerts for frequently purchased items.
- 11. Fruit ripeness scanner or informatic screen to notify perfect time to purchase that fruit.
- 12. Customized song playlists based on shopping pace/steps.
- 13. Grocery app integration with fitness goals tracking.
- 14. Aisle-specific promotions triggered by proximity sensors.
- 15. Digital coupons for eco-friendly product purchases.
- 16. Recipe stations with sample tastings of food made in store kitchens.
- 17. Grocery list sync with family members for live updates.
- 18. Suggestions made based on shopper's ethnicity and associated traditional foods.
- 19. Easiest/quickest recipe suggested with any purchased item.
- 20. Suggest products catered to user's religious, cultural, or eco-friendly diet (vegan, halal, etc.).
- 21. Payment wallet that rewards if grocery shopping is within the targeted budget.
- 22. A mobile app that rewards monthly on reducing the number of grocery shopping trips.
- 23. Rewarding shoppers for sticking to the targeted list of items to avoid unnecessary purchases.
- 24. AI-predicted list of items to purchase based on user's item usage.
- 25. Providing recommendations for the best day to go shopping to reduce shopping trips.
- 26. Remind shoppers to do groceries as salary credits, while staying on budget.
- 27. Use purchasing history to create budgeted list of items to buy next

- 28. Predict the life of pantry items and suggest the best shopping day using AI.
- 29. Tracking unnecessary purchases monthly to suggest items to purchase next within budget.
- 30. Ingredient-based preferred brands for items storage systems.
- 31. Notifying user of purchased items and the number of days left before they expire.
- 32. Tracking spending on each item monthly, using receipts, to avoid overconsumption.
- 33. Adjusting grocery list to include necessary and luxury items within budget.
- 34. AI recipe suggestions based on items available in user's pantry.
- 35. Suggesting recipes to consume the leftovers in the pantry, avoiding wastage of food.
- 36. Alter recipe suggestions without out-of-stock items to avoid extra store trips for just that item.
- 37. An app that creates recommended lists based on user's health & dietary preferences.
- 38. An app that gives personalized meals suggestions for user to recover from a specific disease.
- 39. An AI chatbot that answers questions about nutrition and provides healthy eating tips.
- 40. A mobile app that shows where specific items are located in real-time.
- 41. In-store app that provides personalized shopping routes based on grocery list.
- 42. A wearable app that syncs with in store grocery apps to provide optimized shopping routes.
- 43. Gamified shopping app with fun challenges, like finding healthy items within a time limit.
- 44. Interactive digital shelves for displaying food nutritional information.
- 45. Smart shelves that notify staff when stock is low and suggest alternatives to shoppers.
- 46. In-cart scanning sensor for faster checkout and also suggesting healthier alternatives.
- 47. Social app matches you with random shoppers in stores with similar shopping preferences.
- 48. Self driving cart that follows you around the store.
- 49. Smart fridge syncing with grocery shopping apps to remind if any item is running low.
- 50. Drone delivery service for heavy grocery items.
- 51. Recommendation algorithm that suggests alternate items that will fulfill the same purpose.
- 52. AI aware of all items at home, automatically updates item quantity/availability in real time.
- 53. Shopping-cart robot that shops in place of a person based on provided grocery list.
- 54. Virtual shopping environment that translates to real life via robot avatar in-store.
- 55. Holographic characters, projected life-size in store, marketing items they are associated with.
- 56. Mood-reading aisles that anticipate your next item and lure you.
- 57. Fridge that restocks itself using a high-speed inner highway that connects fridges to stores.
- 58. Shelves that levitate items using magnetism, items can be restocked easily.
- 59. AR headset projecting a personalized shopping buddy.
- 60. Self-driving cars drive to store, employees fill with requested items, send cars back to owners.
- 61. A pantry with sensors that orders grocery items running low, on its own.

- 62. Voice-controlled conveyor belts that bring you items needed from the store.
- 63. Connect and refill the fridge/pantry with grocery items directly from the store.
- 64. Interactive projected grocery checklist in store walls for collaborative shopping with games.
- 65. A robot that floats alongside and suggests what all to add to the cart.
- 66. Smart glasses that highlight an alternate brand in aisle if the preferred is sold out.
- 67. Smart carts that give warning if items in cart exceed the budget.
- 68. Cart that removes unnecessary items on its own to stay within budget.
- 69. Gloves that send shocks if an unnecessary item is picked from the shelf.
- 70. AI based holograms showing floating shoppers in future as they add item to their cart.
- 71. AI-generated holographic friends that shop alongside people living alone.
- 72. Personalized weather-controlled grocery environments to make shopping more comfortable.
- 73. Holographic guides appearing over products offering nutritional info and possible recipes.
- 74. Carts changing color based on the health value of what's inside, encouraging mindful choices.
- 75. Grocery aisles that move like conveyor belts, bringing items directly to customers.
- 76. A gravity-defying grocery store where users float between aisles, to collect items from shelves.
- 77. Wearable tech that vibrates with suggestions for healthier food as shoppers pass by certain aisles.
- 78. A predictive app that pre-orders groceries for users before they even realize they need them.
- 79. AI Robot chef buying groceries directly for cooking customers' requested recipes.
- 80. Interactive floating drone assistants that carry your groceries and offer product information.
- 81. Virtual reality shopping experience from home where customers feel they are shopping in store.
- 82. A neural implant that monitors health and suggests groceries based on biological needs.
- 83. Holographic food samples that let you virtually taste before buying.
- 84. A neural interface that lets you 'mentally' shop while relaxing at home.
- 85. Grocery's payment directly through DNA sampling as in "Altered Carbon".
- 86. Fairy zaps shopper when shopper reaches for nonessential/overpriced items.
- 87. Every time unhealthy item is purchased, demon gains 1% of shopper's soul.
- 88. Small dragon that breathes fully cooked meals onto table when requested.
- 89. Alien co-shopping partners that trade their planet's produce with Earth's.
- 90. Wormhole to any point in space-time & try items only available during that time/location.
- 91. Interdimensional item-sharing via portals, regulated by large grocery stores.
- 92. Grocery items blink warning lights on running low in the pantry.
- 93. Floating holograms in the pantry indicate missing essential items to purchase next.
- 94. A creature that floats and pings you if a needed item is missing in the shopping cart.
- 95. Teleport the needed but "forgot to buy" items to the pantry.

- 96. Teleportation system sending purchased groceries directly to customer's kitchen.
- 97. Floating hover-carts following shoppers, carrying groceries effortlessly.
- 98. Grocery shopping on floating platforms that hover throughout the store, to move seamlessly.
- 99. Grocery 'replicators' that can print real food on demand.
- 100. A mirror in grocery aisles that shows the user's future self based on his current diet choices.

Top 3:

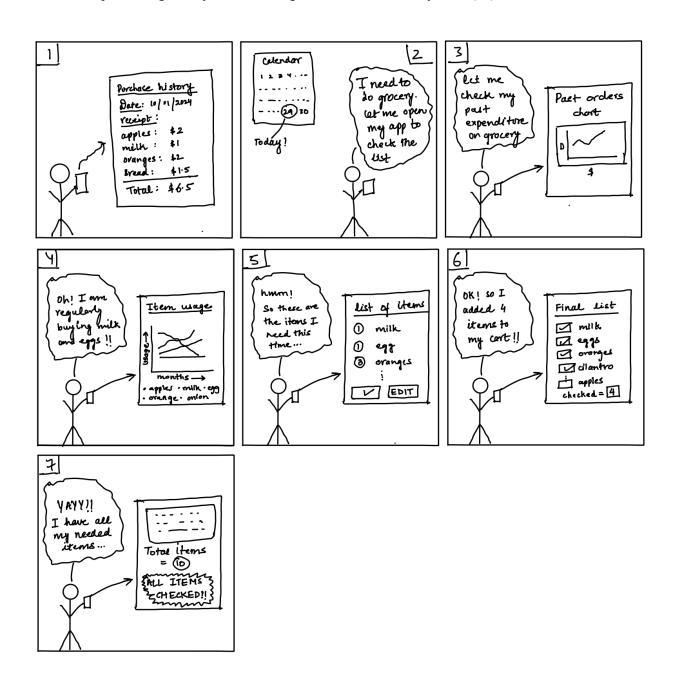
- 1. Reward shoppers with redeemable points in-app upon purchasing *all* list items in one go. (1)
- 2. Use purchasing history to create budgeted list of items to buy next. (27)
- 3. An app that creates recommended lists based on user's health & dietary preferences. (37)
- 4. **Dark Horse:** AI-predicted list of items to purchase based on user's item usage. (24)

Part 2: Storyboards

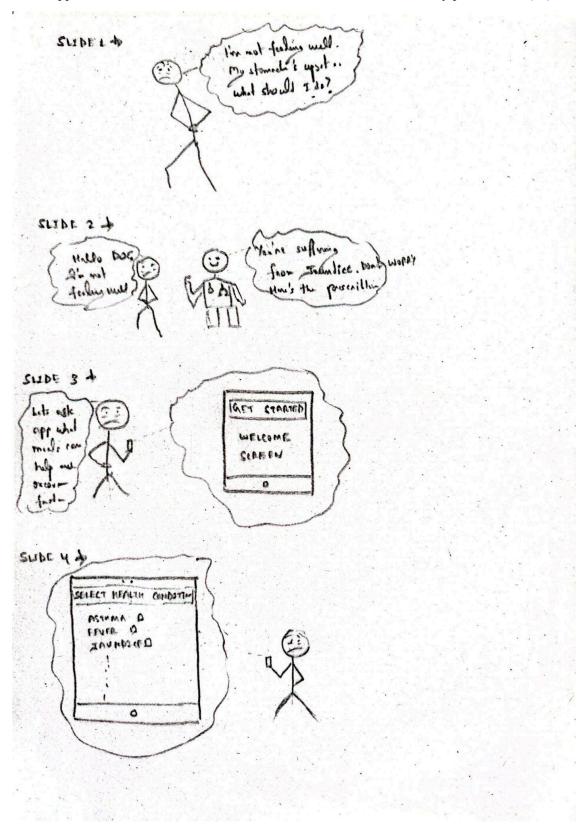
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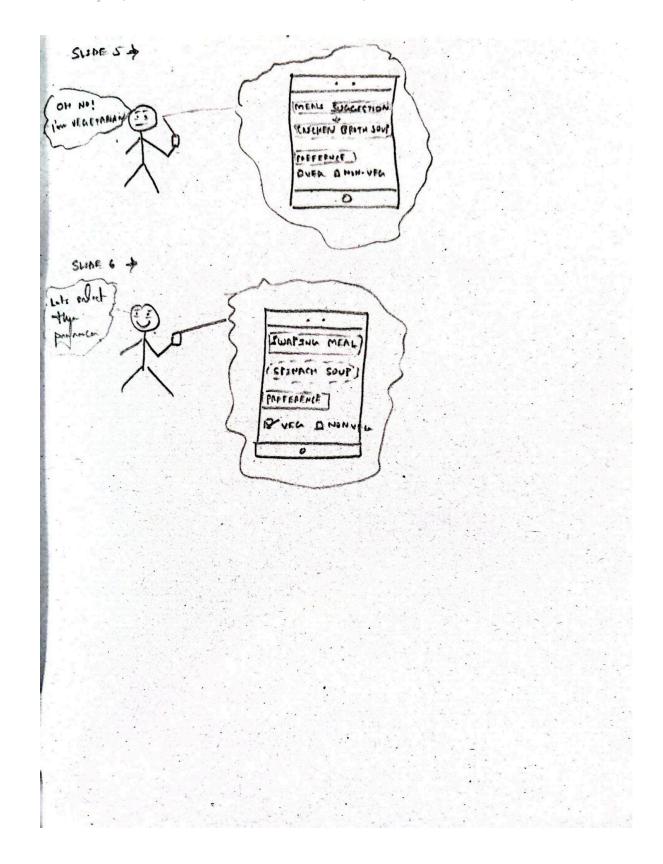


2. Use purchasing history to create budgeted list of items to buy next. (27)



3. An app that creates recommended lists based on user's health & dietary preferences. (37)





4. **Dark Horse:** AI-predicted list of items to purchase based on user's item usage. (24)

