

**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:**

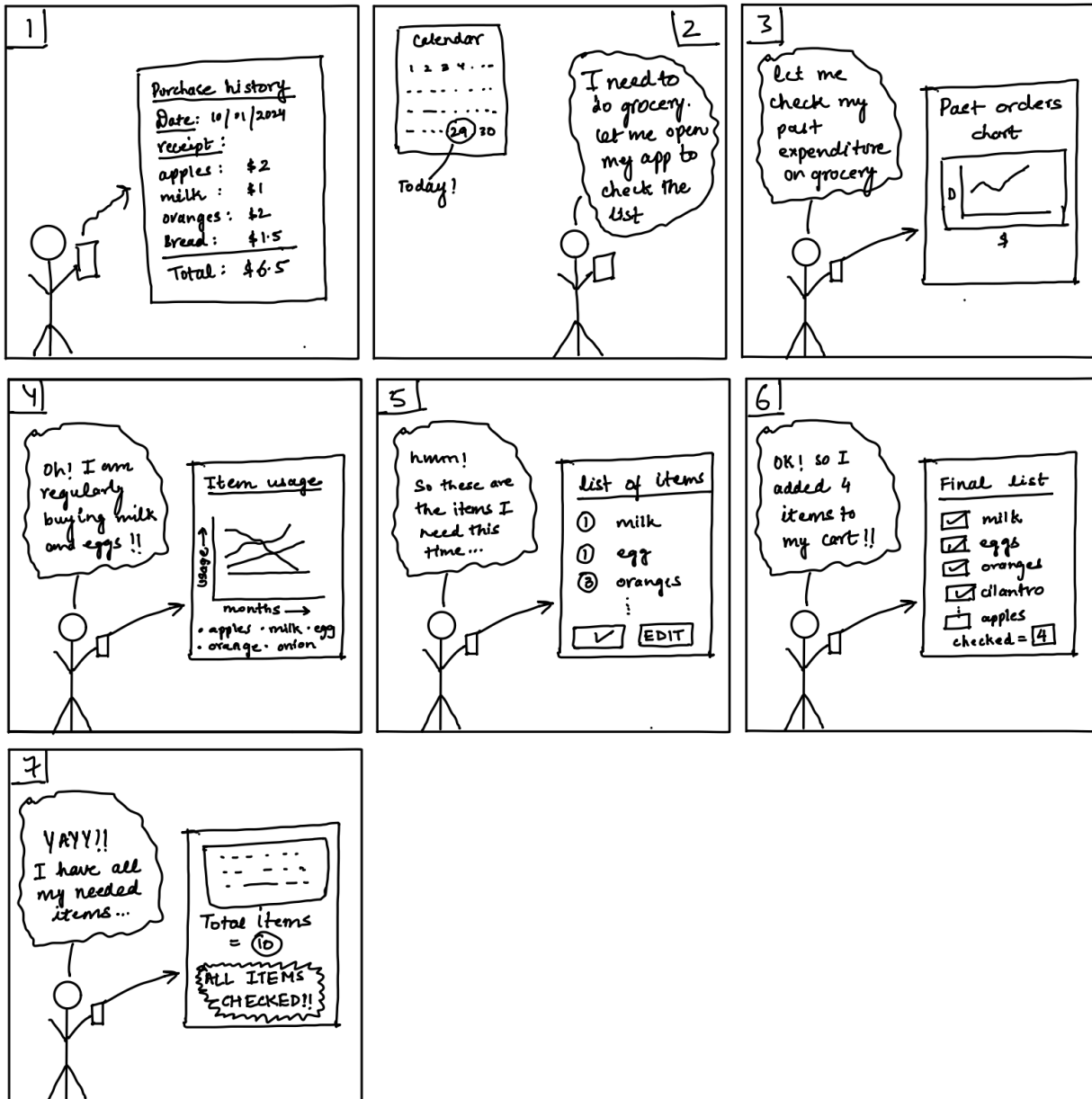
1. Reward shoppers with redeemable points in-app upon purchasing *all* list items in one go. (1)
2. Use purchasing history to create budgeted list of items to buy next. (27)
3. An app that creates recommended lists based on user's health & dietary preferences. (37)
4. **Dark Horse:** AI-predicted list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

**Part 2: Storyboards**

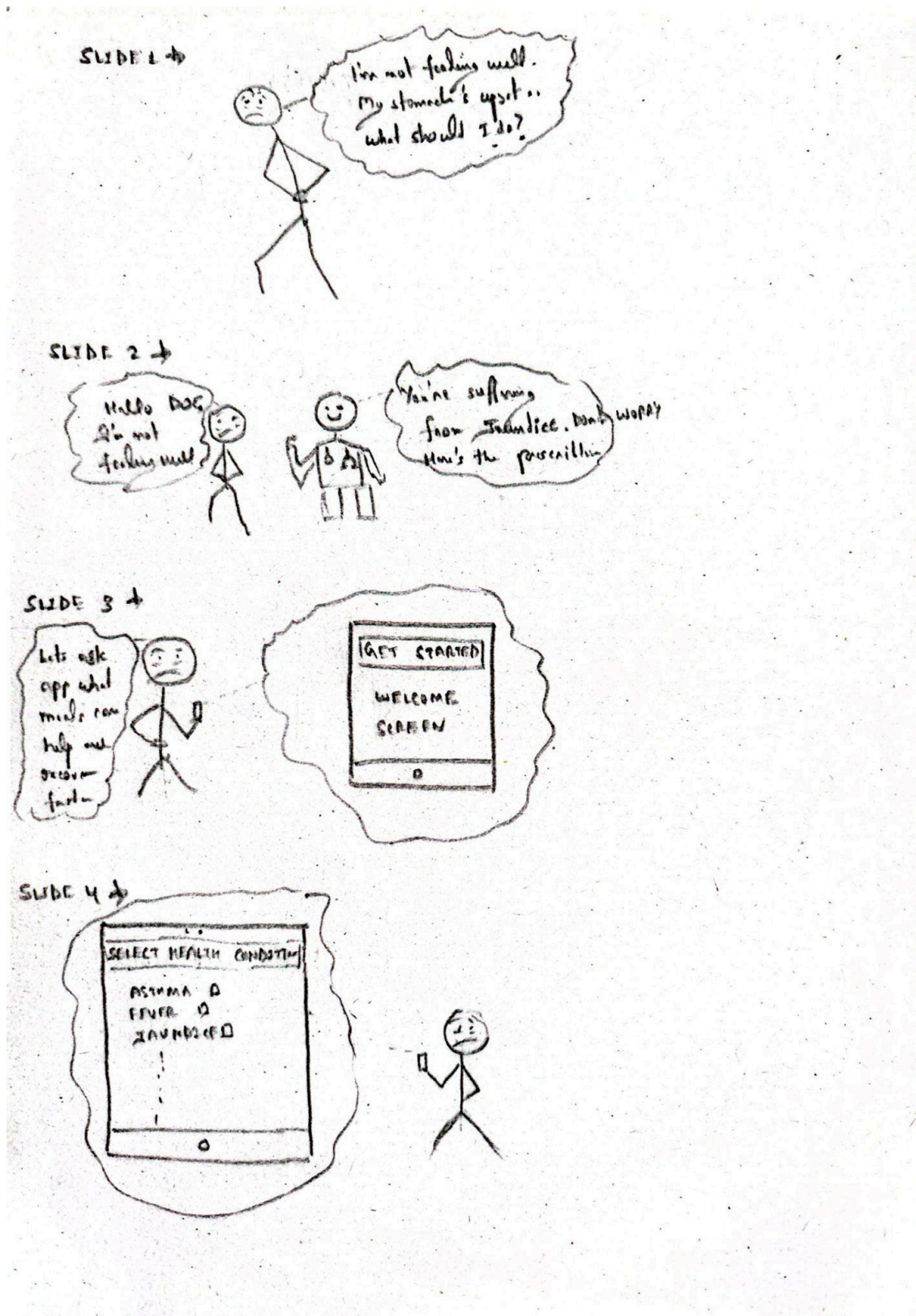
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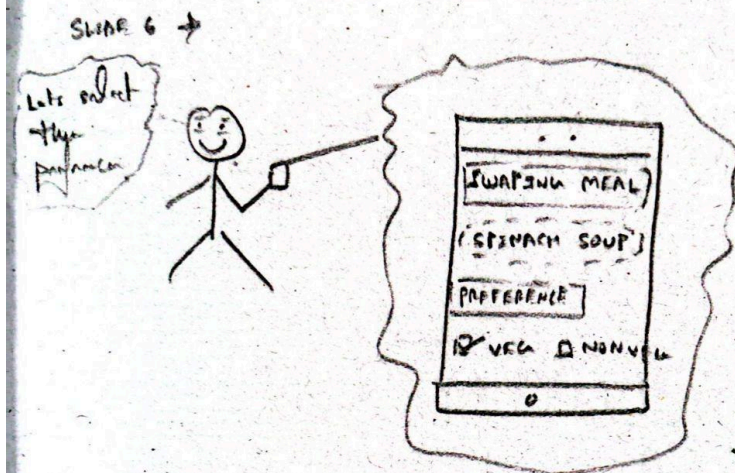
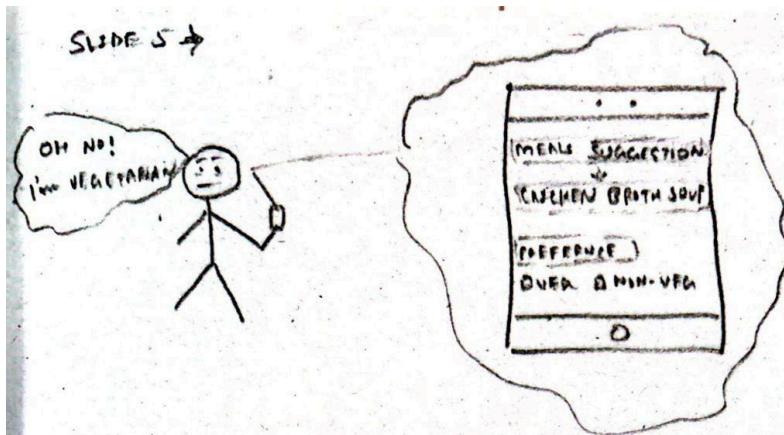
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