36 QUIKPIK

QuikPik: The Humble Beginning

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Problem Introduction

- You and your friends are deciding to watch a TV series together because we are all stuck at
 home because quarantine and want something fun to do together. It takes forever to have
 everyone agree on what to watch because everytime a new idea is brought up it takes time to
 describe what it is and go through the whole process. But what if there was a quicker way.
- QuikPik is an app that helps streamline that issue by having the users all vote on choices like restaurants, TV shows, movies, etc. and then picking the best solution for the group

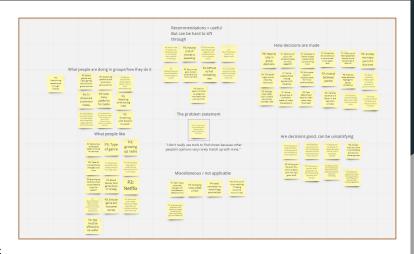


Formative Research: Problem Statement and Semi-Structured Interviews

- We, first, formalized the problem statement, as shown on previous slide
- Developed a User Research Protocol to interview subjects in an ethical and productive manner
- Semi-structured interviews:
 - o Background information re: media consumption
 - Current consumption habits
 - Decision making as a group
 - Google questionnaire/survey

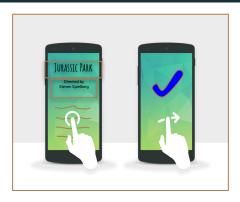


Qualitative Analysis



- Qualitative analysis carried out on interview transcripts
- Open-coding: selecting important information from transcripts, writing a short phrase explaining what is valuable about the quotation
- Clustering Open Codes into rough categories (see image)
- Clustering led to common behaviour patterns, which informed the most essential features to include

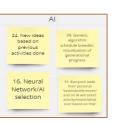
Ideation and Final Idea



- Ideation: generate a large list (75 items) of different ways to solve our problem statement
- Clustering of Ideas: 5 Categories organically arose:
 - Voting, Minigames, AI, Random Selection, and Core app functions
- Several rounds of selection and rating of the ideas pared down the list of possible ideas
- Aspects most essential to a well-designed and usable application remained, giving final app idea





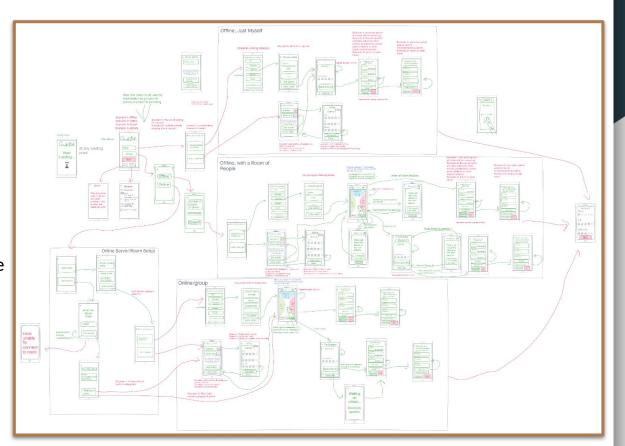




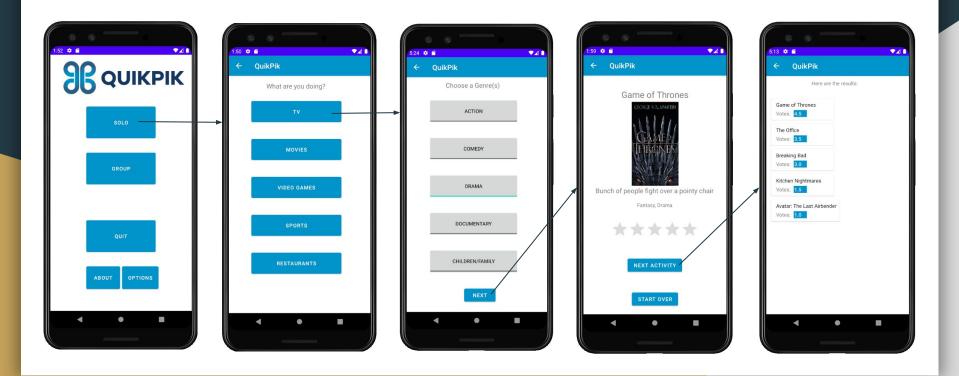
App functions							
El Anno count frontant el grando periodo perio	31. Stage system of picking category or genre first then what else	46. Sunshine mode for outdoor activity, rain mode for indoor activity	9. Integrated into messenger/t exting app	10. One person required to have app, others can reach the "toom" from web browser	(f) Nove mind in him for one calling made if the collect the figure is made if the collect state from the collect of the again had a collect of the the ham in the day of the the ham is not to the collect to the gas to be a given of the collect of the collect the collect of the collect of the collect of the collect the collect of the collect of the collect of the collect the collect of the collect of the collect of the collect the collect of the collect of	37. Suggestions Tike "We want to ean" "We want to walk" "We want to eat" "tille want to sit"	If here is give two consecution to a small of white is a season of the small of white is a season of the small of the smal
6. Timed voting, Too slow, you don't get a vote	58. Have a proximity feature that would check if there is an activity to do nearby because others put in an activity list of soulf to do nearby.	Of the component of the above to give singles to application to be proposed to the property of	56. Ask "this or that" questions about arributes of activity), asset or sally for restaurance, thriller or horror for movies, etc)	30, 20 question and choose your own adventure suggesting next stages for the adventure	App should give "gris" recommendations" based on votes of the group (tags for each activity)	2. Activity suggested based on location (i.e. restaurants within 15 mile radius)	
			35. Different selection modes for each new activity that is going to happen	13. Ranking of users that deckion, Person get ranked up for giving good choices.			

Low-Fidelity Prototype

- Cognitive walkthrough
- Heuristic Evaluations
- Final low fidelity prototype



Final App



User Testing: Methods

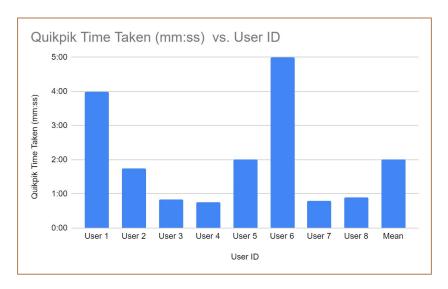
Method 1: User uses QuikPik to find a TV show to watch

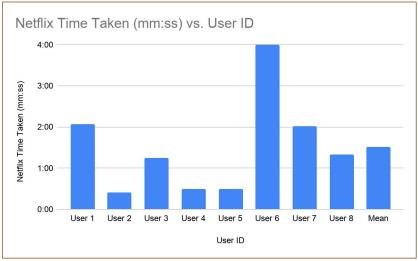
- Formative reveal usability errors, get user's impressions of the errors
- Summative time to find a show to watch, times user presses back button

Method 2: User uses Netflix to find a TV show to watch and compares it to QuikPik

Summative - number of users that prefer QuikPik or Netflix

User Testing: Findings





Statistical Analysis

Problem Statement: Does QuikPik speed up activity selection time vs. Netflix?

- Average time for Netflix was 30 seconds faster than QuikPik (120 seconds vs 90 seconds).
- Sample Standard Deviation: $s_{QuikPik} = 91.41$ seconds, $s_{Netflix} = 67.42$ second
- Can use a hypothesis test of two means

Statistical Analysis, cont

- Hypothesis test of two means tests our claim that QuikPik speeds up activity selection.
- H_0 : $u_{\text{OuikPik}} u_{\text{Netflix}} = 0$, H_A : $u_{\text{OuikPik}} u_{\text{Netflix}} < 0$, n = 8
- Test Statistic: $((120-90) 0) / \sqrt{(67.42^2 / 8) + (91.41^2 / 8)} = .747, p = .234$
- There isn't strong evidence that QuikPik is faster than Netflix.
- Errors with Test / Confounding Conditions:
 - Familiarity with Netflix and/or unfamiliarity with QuikPik
 - Small sample size, high sample variance (s = $\sqrt{\left[\sigma_{QuikPik}^2 / n_{QuikPik} + \sigma_{Netflix}^2 / n_{Netflix}^2\right]}$)
 - Selecting a show that they are familiar with on Netflix, rather than something new which is the primary purpose of QuikPik
- 95% Confidence Interval for difference in time selection between Netflix and QuikPik
 - \circ (120-90) +/- 1.645 * $\sqrt{(67.42^2/8) + (91.41^2/8)}$
 - o Result: (-36.06 seconds, 96.06 seconds)
 - Same errors / confounding conditions apply

User Testing: Findings

App specific problems:

- App is unclear on what predetermined and custom categories are
- The star/rating bar at the bottom is somewhat ambiguous
- The rating screens had no images, nor playback functionality for the shows in the application itself
- Users needed to have the results screen explained to them

Overall findings:

- Users would like some randomness involved when given a predetermined list
- Users weren't faster at selecting TV shows from QuikPik vs Netflix
- Users often times back out on things they select from Netflix quickly if it doesn't catch their interest
- Focus should primarily be on having this app be for groups
- If the shows are not available through the app itself, to show where to find them online

Future Developments and Testing

Developments:

- Create a system that selects from a database (Netflix, IMDB, etc) for predetermined categories. Allow users to enter additional options for predetermined categories that would get saved locally.
- Finish and expand group selection.
- Add more detail to the rating system (more metrics, better explanations of ratings).
- Add functionality to show where you can watch that show, or even select platforms you own and select only from that.

Testing:

- Increase sample size so variance is lower, which would allow us to get more accurate results regarding if QuikPik is faster than Netflix.
- Give a small training session prior to testing so that the proficiency level with QuikPik is closer to that with Netflix.
- Ask participants to find a NEW activity specifically.