

**INFO31179 Human Computer Interaction:
Assignment 2**

Part 1: Procedure of Need-finding

1. Who are the end users (audience) of the app you designed prototype for?

A: The target audience of end users for my app, that I have designed a prototype for, is the senior and elderly population.

2. What should you consider for each group of audience for your app?

A: Due to common health concerns among my target audience group of the seniors and elderly population, like reduced vision or hearing, reduced motor skills, etc, I should consider design features that will benefit or make the user experience for them easier and more enjoyable such as:

- larger and bolded fonts
- larger icons
- bigger buttons and tabs
- less brighter color palettes
- large screen real estate to view more content at once with overwhelming them
- ways of contacting volunteers for help for anything

These are just a few of the features that could be implemented to greatly benefit seniors to list. There are many more features along with these.

3. Find similar successful apps to your application, and investigate what users liked or disliked about the application. Mention top five apps almost similar to yours.

A:

App 1: COVID Alert!

Country: Canada

Developer: Health Canada

User Likes:

- Continuous exposure checks registered, even when app is not open
- Able to detect any person who tested positive for COVID through random, anonymous codes generated by the app that generates which the users can send out
- Toggling the Covid exposure tracker on and off

User Dislikes:

- Only works (performs exposure checks) when on Bluetooth
- No option to opt out of data collection
- Non-exposure notifications marked with red icon gives a shock to some
- Lack of further guidance with using new features when they come out
- Detection exposure when in meters of someone for 15 minutes is not safe enough

App 2: COVID Tracker Ireland

Country: Ireland

Developer: Health Service Executive (HSE)

User Likes:

- Continuous checks with nearby devices via Bluetooth and sending randomly generated ids in case of being notified by someone who tested positive
- Simple, Intuitive UI
- Secures user privacy when using contact tracing

User Dislikes:

- Lack of graphical representation of data for observation the rise and fall of vaccinations overall
- Statistics don't update often and tend to show out of date data
- No provision of general steps in the vaccination process
- Doesn't say the dates vaccines are offered as well as which group is currently being vaccinated in the vaccination section
- Hard to distinguish vaccinated vs. not vaccinated users on the app

App 3: NHS COVID-19

Country: United Kingdom

Developer: Department of Health and Social Care

User Likes:

- Option to update covid status
- Ability to track and record covid tests while notifying if potentially infected
- Inputting post code via QR reader is easy

User Dislikes:

- Constantly annoys by sending notifications to users an unnecessary number of times, including reminder notifications to turn on Bluetooth and notifications that just say "loading"
- Unable to read notifications without Bluetooth on
- Exposure notifications pop-up size too small to view and once clicked on, doesn't shown anything to the screen
- No way of pinpointing or logging location when near a person who tested positive

App 4: Covid Alert DE

Country: United States of America

State: Delaware

Developer: Delaware Department of Health and Social Services

User Likes:

- Simple UI, good execution of functionality
- Functioning with Bluetooth secures user data privacy

User Dislikes:

- The API that the app uses doesn't support older phones
- Doesn't reminder users daily to check in enter their current data
- No setting available for users who are vaccinated to keep track of their progress
- Data page sometimes freezes and hangs

App 5: COVID Alert PA

Country: United States of America

State: Pennsylvania

Developer: Commonwealth of Pennsylvania

User Likes:

- Simple, easy to use UI
- Quick and easy process to in answering daily exposure check-up questions
- Great for tracking self-related symptoms
- contact tracing
- covid information on a up to date and nicely broken down in regard to local status, statewide status, & national status

Users Dislikes:

- No current list of symptoms on daily check-in screen
- No overall statistics on vaccinations
- Unable to book vaccine appointment from app
- Display of country/state current phase status needed

4. What examples of latent needs can you think of?

A:

Latent Need 1: Elevators

Elevators made it easier for people get to higher level floors more quickly and easily, especially when trying to get to floors that are serval levels above their current one, thus, replacing stairs which, using those, would take much longer to reach those floors that are serval levels above one they are on.

Latent Need 2: Phones

Phones made it easier for people to communicate with one another more easily and quickly. Thus, replacing letters as a primary mode of communication as it can take weeks to months to reach the recipients depending on the sender's location.

5. What are good ways of finding latent needs?

A:

- Focus on the needs and not the solutions as that will limit opportunities. If a room is too hot, do not say fan, but state that the room is too hot.
- Go to the customer's environment as it makes the need more specific. By immersing yourself in the need group, you would be able to view its problems with "fresh eyes". The Facebook mobile app was done awfully because the software engineers rarely leave the

office and use mobile applications. As a result, by not being the user, they could not figure out specific need.

- Go beyond the obvious problem.
- Collect different types of data, including notes, photos, video and audio Interviews and observations and data from objects used can all tell different stories. Make findings tangible so that they may be communicated and presented to others.
- Iterate

6. In your design logbooks, practice going through the Need-finding process:

A:

Combination 1: College students + Agenda Schedule Management

User Group: College Students

User Group-Related Activity: Agenda Schedule Management

Hypothesis: College Students use their phones to manage their schedules and therefore don't need physical agenda books anymore

App to Observe: Todoist: To-Do List, Tasks & Reminders

Developer: Doist

User Feedback Data about App:

- Very comprehensive features
- Consistent and stable yet customizable app structure
- Easy to use
- Able to organize Project Management task with teams easily
- Able to use app on Mobile and Desktop
- Able to integrate with other applications like Trello
- Able to associate tasks with projects, and create tags for them for better organization
- Comprehensive UI with user-friendly shortcuts when entering and creating tasks, overall making the app more enjoyable

Potential Needs/Product Opportunities:

- Ability to sync tasks, projects and other schedule items up with Google Calendar or other similar Cloud-connected apps
- Option to add reminder alarms for tasks that due and upcoming
- Function to set time and date of a task from dropdown/slider/picker options

Combination 2: Adults in the workforce + Financial Management

User Group: Adults in the workforce

User Group-Related Activity: Financial Management

Hypothesis: Adults in the workforce use their phones to track their assets and expenses and therefore don't need paper-based financial spread sheets anymore

App to Observe: Mint: Budget, Bills, & Finance Tracker

Developer: Intuit Inc.

User Feedback Data about App:

- Tracks expenses in detail
- Automatically labels purchases for placing in spending categories

- Easy budget system and notifies user when they go over-budget
- Easily stores assets and expenses in central hub- like format
- Customization of categories to reflect user categories

Potential Needs/Product Opportunities:

- Place ads in a way where it doesn't interfere with the main content
- Make the process of linking bank accounts more user-friendly
- Make sure functionality works with 2FA more seamlessly

Combination 3: Seniors & Elderly + Medication Management

User Group: Seniors & Elderly

User Group-Related Activity: Medication Management

Hypothesis: Seniors & Elderly use their phones to track and manage their medications they need to take and therefore don't need write them down on a paper-based tracking table anymore

App to Observe: Pill Reminder & Medication Tracker - Medisafe

Developer: Medisafe

User Feedback Data about App:

- Prompt and punctual reminders to take medication
- Intuitive, appealing, simple UI
- Many options to customize medication details with when adding them in
- Able to record and track medication and biometrics in a user-friendly way

Potential Needs/Product Opportunities:

- Notify the user when the next day will start and make changes accordingly
- Make sure sounds are assigned for each distinct function
- Ability to sync doctor contact and appointment information

Part 2: Procedure of Competitive Analysis

Competitor List

Name	Website URL	Number of Users	Active Since	Features	Cost
COVID Alert!	https://www.canada.ca/en/public-health/services/diseases/coronavirus-disease-covid-19/covid-alert.html	1,000,000+	Jul. 29, 2020	<ul style="list-style-type: none"> • Exposure notifications • Bluetooth • Contact Tracing • Exposure Guidelines • Exposure Diagnosis Reporting 	Free

COVID Tracker Ireland	https://covidtracker.gov.ie/	500,000+	Jul. 15, 2020	<ul style="list-style-type: none"> • General and Exposure Notifications • Contact Tracing • Links to HSE Health Advice • COVID Overall Statistics (Text and Graph) • Vaccinations Statistics • Daily Check-In Diagnosis • Check-In Reminders 	Free
NHS COVID-19	https://covid19.nhs.uk/	5,000,000+	Aug. 12, 2020	<ul style="list-style-type: none"> • Contact Tracing • Virus Risk Alerts • Venue Check-In Exposure Scanner • Symptom Checker • Test Ordering • Self-Isolation Countdown Timer • Multi-Language Compatibility 	Free
Covid Alert DE	https://coronavirus.delaware.gov/covidalert/	10,000+	Sept. 8, 2020	<ul style="list-style-type: none"> • General and Exposure notifications and alerts • Contact Tracing • Daily “Fight” Statistics • COVID Overall Statistics 	Free

				(Text and Graph) <ul style="list-style-type: none"> • Symptoms Tracking • Daily Check-In Diagnosis • Check-In Reminders 	
COVID Alert PA	https://www.pa.gov/covid/covid-alert-pa/	500,000+	Sept. 10, 2020	<ul style="list-style-type: none"> • Random ID Generation and Exchange • Exposure Alerts • Option to Contact Health Representatives • Symptoms Tracking • Daily Check-In Diagnosis • COVID Overall Statistics (Text and Graph) • Vaccinations Overall and Stage Statistics and Information • Check-In Reminders 	Free

Competitor Analysis Matrix

Features/Parameters	COVID Combat!	COVID Alert!	COVID Tracker Ireland	NHS COVID-19	Covid Alert DE	COVID Alert PA
General Statistics (Country/State/Province)	X		X	X	X	X
General Tips	X	X	X		X	X
COVID-19 Guides	X	X	X		X	X
Chats	X					
User Accounts	X					
Scrollable Screens	X	X	X	X	X	X
Tab-Based Navigation	X		X		X	X
Large/Rounded/Beveled/Folder-Styled Interface Elements	X	X	X		X	X
Large Fonts and Text	X		X	X	X	X
Vibrant Color Palettes	X		X		X	X
In-App Navigation to Other Pages via Alternative Button Links	X		X		X	X
SCORE	91	34	74	24	74	74

Competitor Product UX/UI Issue Analysis

Competitor App Name	UX Issues	UI Issues
COVID Alert!		
COVID Tracker Ireland		
NHS COVID-19		
Covid Alert DE		
COVID Alert PA		

Part 3: Screens Overview and Public Share URL Link of COVID Combat! Second Prototype

1. Screens Overview of COVID Combat! Second Prototype



2. Public Share URL Link of COVID Combat! Second Prototype

<https://www.figma.com/file/7BPt40Jbfl1clcgPZsuNPI/COVID-Combat-V2?node-id=0%3A1>