Case study: My Orchestra App

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Project overview

The product:

I'm creating an app that helps students, teachers, and parents learn about, or use as a teaching tool, the orchestra. Busy parents need ways to help their children at home, and there are currently limited options to do this for orchestra, in the market today.



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Project duration:

April 2022 to August 2022



Project overview



The problem:

Busy parents lack the time to help their students learn at home, and orchestra teachers need ways of using technology in the classroom



The goal:

Our My Orchestra App will let users learn about the instruments of the orchestra which will affect students, parents, and teachers by helping them learn or teach how instruments of the orchestra sound, look, and are played. We will measure effectiveness by tracking reviews from 5+ users of our app.

Project overview



My role:

Identify UX designer designing an app called My Orchestra App from conception to delivery.

Responsibilities:

Conducting interviews, paper and digital wireframing, low and high-fidelity prototyping, conducting usability studies, accounting for accessibility, iterating on designs

Understanding the user

- User research
- Personas
- Problem statements
- User journey maps

User research: summary



I conducted interviews and gave surveys to understand the needs of my users. A primary user group discovered through research were adults with children who live busy lives at work and home, and don't have extra time to help their kids with schooling.

This user group validated thoughts about My Orchestra App's customers; users had busy lives and did not have time to help their children with academics at home. Other scenarios keeping users from helping their kids were interests, hobbies, commitments to work schedules, and impairments.

User research: pain points





Time

Working adults have time commitments in and outside of their employment.

Accessibility

Apps for learning are not equipped with assistive technologies. A screen reader is one example. Typing for apps are too small, the type is hard to read, or spacing is too cluttered.

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keeping time

Stress

In keeping time commitments, working adults feel stressed when trying to balance.

Persona: Leah

Problem statement:

Leah is a Doctor who needs to help her child study for her orchestra class when she gets home from work. She would like her child to improve her orchestra grade.



Leah

Age: 42

Education: Doctor of Medicine (MD) Hometown: Newport, Rhode Island Family: Married with two young children Occupation: Doctor "I care a lot about being there for my patients, but have a tough time balancing work and home life."

Goals

- Find more time to give herself a break
- Find an easier way to order food, groceries, and personal items
- Better manage time at home and work

Frustrations

- Uses a screen reader, but not all apps and websites work with it
- Although she loves her job she has a very demanding schedule

Leah is a medical doctor and loves her fast paced life. She has a visual impairment and uses screen reader technologies to help her use apps and websites, but not all apps and websites can be used with her reader. She would like to find a better balance of time between her home and work life and ordering food and personal items on-the-go may help.

User journey map

Mapping Leah's user journey revealed how helpful it would be if parents had apps to help learning at school. In this case, the orchestra.

Persona: Leah

Goal: Help my child increase his orchestra grade without too much help from me.

ACTION	Select Orchestra App	Browse Apps	Purchase App	Complete Order	Show the App to Son
TASK LIST	 A. Open the app store on iPad B. Search orchestra apps in browser C. Narrow down to 3 	 A. Browse through 3 apps B. Find topics relevant for class C. Select the App 	A. Locate add to cart button B. Add credit card info C. Locate buy or purchase button	A. Confirm purchase B. Download to iPad	A. Find sons iPad B. Look to see if the orchestra app has been downloaded for him C. Open the app
FEELING ADJECTIVE	Overwhelmed by number of orchestra apps Excited that there should be an app that will help	Annoyed can't search in the app itself for keywords	Not happy that it needs me to add credit card instead of using my saved info Anxious about hoping the card works correctly online	Worried that the correct credit card numbers weren't added correctly due to my visual impairment Anxious about the app working on my sons iPad if I purchased it on my iPad	Happy the app works for son
IMPROVEMENT OPPORTUNITIES	Narrow the search by typing in keywords	Provide search filters Optimize apps for screen reader technology	Simpler checkout	Send to family sharing IPad	Include optional membership for emails about the content son is learning

Starting the design

- Paper wireframes
- Digital wireframes
- Low-fidelity prototype
- Usability studies

Paper wireframes

Drafting design iterations of the home page helped in deciding which would work best when keeping the users pain points in mind.



Stars show elements that were used in the initial digital home page.

Digital wireframes

With findings and feedback from user research, I based the designs to give users what they wanted most; ease!



Digital wireframes

clear

Easy navigation was a key user need to be addressed in the design. With big clickable images, navigation becomes easy for all users. Assistive technologies, such as the availability to use a screen reader, have also been added.



Big buttons with appealing images show where the buttons will lead.

Low-fidelity prototype

The low-fidelity prototype connected the primary user flow of selecting, listening, and taking a quiz about an instrument could be used in a usability study with users.

View the My Orchestra Ap <u>low-fidelity prototype.</u>



Usability study: findings

Write a short introduction to the usability studies you conducted and your findings.

Round 1 findings

- Users need an easy way to learn about the orchestra
- 2 Users need the app to be easy to navigate
- 3 Users need the app to not be overwhelming

Round 2 findings

- 1 Users like sections of the app are intuitive
 - Users need more choices when navigating
 - Users like images instead of words when possible

Refining the design

- Mockups
- High-fidelity prototype
- Accessibility

Mockups

Early wireframes allowed for some navigation on most pages, but after the usability study I added multiple buttons for navigation. Here, the quiz has one button in the wireframe, but in the mockup there **two buttons plus a slider** (in addition to the navigation bar).

Before usability study



After usability study

Mockups

Insights from the second study were that some pages were too busy, it is hard to see each section's purpose, and is difficult to read. Lused **asymmetry** for the bottom half of the screen, a different **color choice** for the "Select Instrument" button, and removed some non-essential images.

Before usability study 2



After usability study 2

Mockups



High-fidelity prototype

The final high-fidelity prototype shows easier user flows for each instrument, going through the information, listening, quiz sections, then back home.

View the My Orchestra App <u>high-fidelity prototype</u>.



Accessibility considerations

Color combinations were

added so important buttons were easier to see. Red was used for very important, blue for important, and light blue for not that important. Navigation was made simpler by including a slider, gallery, and home, profile, and about button on each page.

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Instead of using words for directing the user, when possible, icons and imagery were used to guide the user through the app.

Going forward

- Takeaways
- Next steps

Takeaways



Impact:

The app makes users feel that it is accessible to everyone including children, parents, and teachers.

One quote from peer feedback: *"I think my kindergartner, as well as myself and his teacher, will really enjoy learning from this app! It is so intuitive and I love the colors and images!"*

What I learned:

When designing the My Orchestra App I learned to appreciate how many steps a UX designer goes through to not only make the app functional, but functional and accessible for everyone.

Next steps



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Conduct more usability studies to see if there are any remaining or new pain points from the latest mockup. Continue to get feedback from all stakeholders through formal or informal means. 3

Work with developers to delivery the best product to the costumer.

Let's connect!



Thank you for taking time from your day to review my work on the My Orchestra App! If you'd like to get in touch or find out more, please get in touch by using my contact information below.

Email: jdundor@wgu.edu Website: Coming Soon Thank you!