

# Thrifty

By Logan Barrett, Emin Okic, and Matt Rayman



# The Problem of Fast Fashion

- Fast fashion is an increasing trend in the clothing industry
  - Causes more frequent purchases and lower use per item
- The clothing industry is a leader in pollution and environmental harm
  - Up to 85% of textiles each year end up in landfills
  - The average American throws away 81 pounds of clothing each year
  - Contributes 10% of all carbon emissions
  - Contributes 31% of plastic pollution in oceans
  - Consumption of resources like trees and water leading to desertification
    - 2000 liters of water to produce 1kg of cotton

# The Solution of Thrifty

- Thrifty is an app where individuals and companies can buy, sell or trade clothing items online
  - Find clothing for cheaper prices
  - Browse large collections online easily rather than in thrift stores
  - Sell clothing to gain value rather than leading to more waste
  - Companies can advertise and sell “out of trend” clothing easier

# The Business Model Canvas

# The Business Model Canvas

Designed for:  
Thrifty App

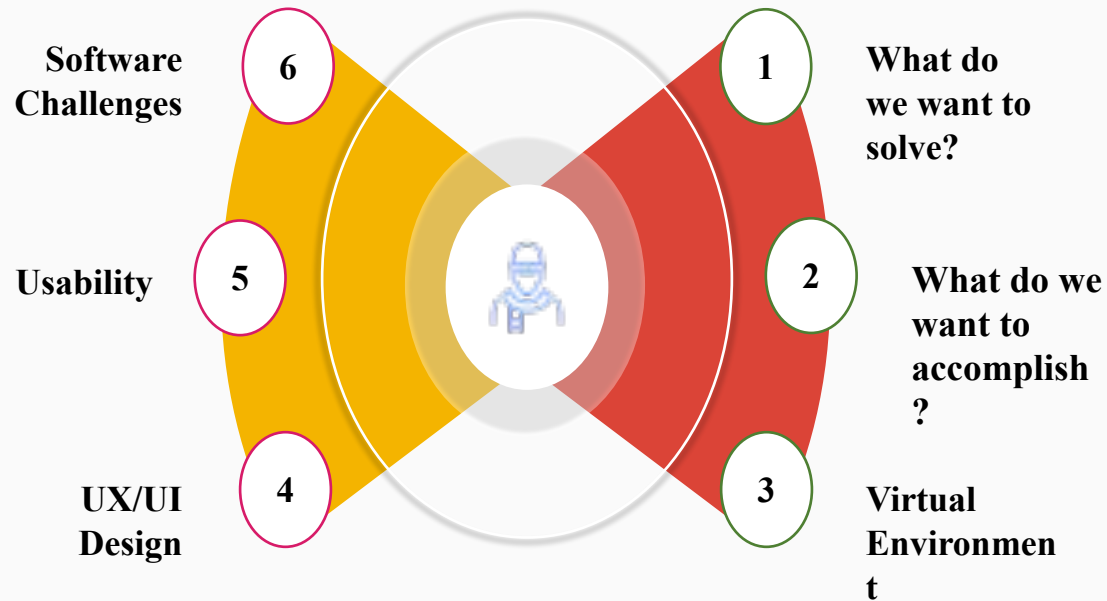
Designed by:  
Logan Barrett,  
Emin Okic,  
Matt Rayman

On: 20/11/2020

Iteration # 1

<p><b>Key Partners</b></p> <p>Who are our Key Partners? Who are our key suppliers? Which Key Resources are we acquiring from partners? Which Key Activities do partners perform?</p> <ul style="list-style-type: none"> <li>Potentially could have social media influencers to help advertise             <ul style="list-style-type: none"> <li>Help to acquire customers looking to purchase clothing</li> </ul> </li> <li>Fast Fashion Companies with excess clothing             <ul style="list-style-type: none"> <li>Help to provide a larger supply of clothing than the average single user</li> </ul> </li> </ul>	<p><b>Key Activities</b></p> <p>What Key Activities do our Value Propositions require? Our Distribution Channels? Customer Relationships? Revenue streams?</p> <ul style="list-style-type: none"> <li>Good customer relationships (reliable/trustworthy users)</li> <li>Easy to use interface to make it easier to browse than in person</li> <li>Maintaining/gaining customers and key partners</li> </ul>	<p><b>Value Propositions</b></p> <p>What value do we deliver to the customer? Which one of our customer's problems are we helping to solve? What bundles of products and services are we offering to each Customer Segment? Which customer needs are we satisfying?</p> <ul style="list-style-type: none"> <li>Decreasing clothing waste/pollution due to fast fashion             <ul style="list-style-type: none"> <li>Average American throws away 81 pounds of clothing every year</li> <li>The fashion industry is one of the leaders in air/ocean pollution</li> </ul> </li> <li>Easier alternative to other forms of thrifting             <ul style="list-style-type: none"> <li>Can do it from home</li> <li>Browse more items in less time</li> </ul> </li> <li>Personalized experience through machine learning</li> <li>Potential to meet people with similar fashion styles and make friends</li> </ul>	<p><b>Customer Relationships</b></p> <p>What type of relationship does each of our Customer Segments expect us to establish and maintain with them? Which ones have we established? How are they integrated with the rest of our business model? How costly are they?</p> <ul style="list-style-type: none"> <li>Provide high quality, personalized thrifting experience for users.</li> <li>Having reliable users/items being sold since users are the ones interacting with each other</li> </ul>	<p><b>Customer Segments</b></p> <p>For whom are we creating value? Who are our most important customers?</p> <ul style="list-style-type: none"> <li>Fast Fashion Companies with extra clothing going to waste</li> <li>People with extra/unused clothing</li> <li>People looking for new clothing</li> <li>All the above groups are about equally important (Need to have around an equal quantity of supply and demand)</li> </ul>
<p><b>Cost Structure</b></p> <p>What are the most important costs inherent in our business model? Which Key Resources are most expensive? Which Key Activities are most expensive?</p> <ul style="list-style-type: none"> <li>Providing good customer service/ easy to use interface</li> </ul>		<p><b>Revenue Streams</b></p> <p>For what value are our customers really willing to pay? For what do they currently pay? How are they currently paying? How would they prefer to pay? How much does each Revenue Stream contribute to overall revenues?</p> <ul style="list-style-type: none"> <li>Add a small surcharge that will decrease as customers/transactions grow to remain profitable</li> </ul>	<ul style="list-style-type: none"> <li>Customers only have to pay what they are willing for individual items</li> <li>Customers set their own price</li> <li>Currently paying as much if not more at stores</li> </ul>	

# Design and Development Challenges



# Design Choices

- Cross platform compatible app
  - ie) as little constraints as possible to maximize user satisfaction.
- Blue colorway
  - Blue is able to bring on feelings of calmness.
- Swiping screen for browsing
  - User interaction increases as it requires more frequent attention.
- Machine learning based on item tags based on images
  - The goal is to have our software decide for the user and avoid a feeling of confusion that may occur.

# What was Done in Terms of Design Choices?

- We have largely finished the following research:
  - Software Requirements Specification
  - People to People Surveying
  - User Interface Design
  - Bigger Problem, Medium Problem, and Smaller Problem are identified.
- Designing Thrifty
  - Deciding what features to emphasize, and what features we didn't require
  - Documentation regarding design choices can be found in the SRS.

# Our Experience in Designing an Application

- We learned a lot of new software tools and concepts to help us develop effective business applications.
  - Software Requirements Document, Surveying, User Interface Design, etc.
- Finding a Problem, and addressing it.
  - Business canvas model
- We liked being able to apply knowledge from our previous courses

# Software Development Practices and Tools

- React Native
- Typescript
- Firebase
- Expo
- AGILE-like development practice

# What was Done in Terms of Functionality?

- We have largely finished the following functionalities:
  - Account creation/customizable profile screen
  - Item uploading with pictures and details
  - Item browsing
  - Overall navigation and template for future screens
- Designing Thrifty
  - Documentation

# Thrifty Limitations

- Users cannot view the clothing items in person
- Dealing with shipping/requiring local meet up
- Have to trust users to post accurate information
- An eventual large database could make browsing harder
  - Currently can only view items one at a time rather than grid view
  - Currently no saved browsing history

# Our Experience as Developers

- Able to gain a deeper understanding of web development tools
  - React Native, Typescript, and Javascript
- Able to gain a deeper understanding of server-side development tools
  - Firebase
- We liked being able to apply knowledge from our previous courses

Demo

