GitHub Username: DrKristoff

ChoreMatic

Description

ChoreMatic is an automated system for organizing household chores. Removes the headache of when to do tasks, and how often. ChoreMatic asks questions about your home and then automatically creates cleaning checklists and evenly schedules the tasks over time. Customize as much or as little as you want.

Intended User

This app is intended to be used by anyone interested in organizing household chores, whether it be families or roommates, used by individuals.

Features

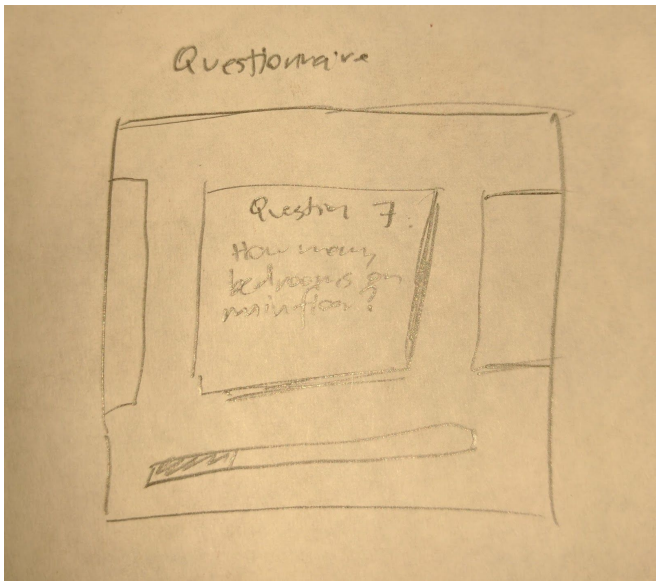
- Creates a chore list based on questionnaire during setup
- Automatically schedule chores and distribute them evenly throughout the week
- Syncs across different devices

- Notifications of what chores are due that day
- Widget that shows daily chores in a list format

User Interface Mocks

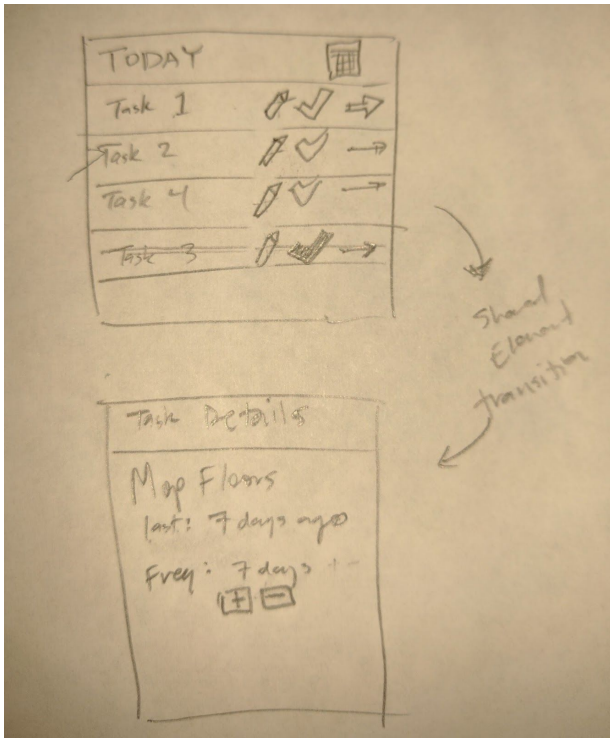
These can be created by hand (take a photo of your drawings and insert them in this flow), or using a program like Photoshop or Balsamiq.

Screen 1



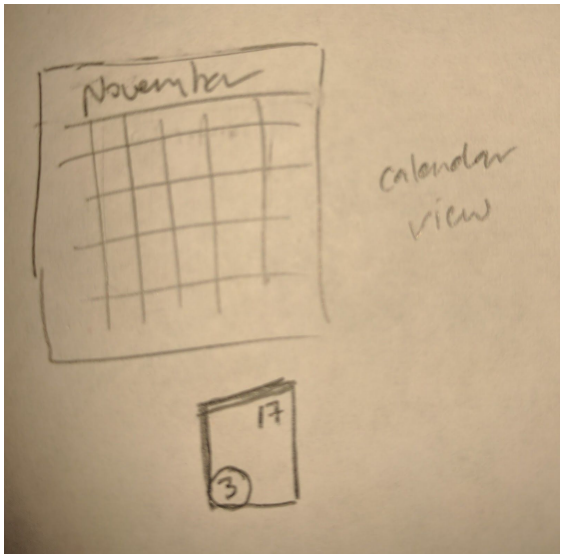
Questionnaire will be a series of card fragments that ask questions about the user's home. Progress bar at the bottom.

Screen 2



Daily task list. Options for interacting with each element on the right of each item. Hidden first, but then appear on tap. Editing a task allows you to see task meta data and adjust frequency.

Screen 3



Calendar view shows task distribution. User can also see which tasks are scheduled when.

Key Considerations

How will your app handle data persistence?

I plan on using the database features of Firebase for data persistence. I plan on following the best practices listed in the documentation.

Describe any corner cases in the UX.

For example, how does the user return to a Now Playing screen in a media player if they hit the back button?

Describe any libraries you'll be using and share your reasoning for including them.

I want to try using Once for one-time operations, like overlay instructions or the questionnaire / setup. It could also be used to prompt the user to rate the app after so many usages. I also plan to use the GSON library for handling the JSON strings needed for the database. I also want to use Evernote's Android-Job library for scheduling future tasks.

Describe how you will implement Google Play Services.

Firebase cloud messaging for daily chore notifications, Firebase auth for login, Firebase real-time database for persistent data, and crash analytics.

Next Steps: Required Tasks

This is the section where you can take the main features of your app (declared above) and decompose them into tangible technical tasks that you can complete incrementally until you have a finished app.

Task 1: Project Setup

- Create chore list JSON with title, description, frequency, last performed, etc. metadata
- Design Questionnaire
- Create auto-scheduler logic
- Setup Firebase Crash Analytics
- Setup Firebase Real time database
- Setup Firebase Cloud Messaging

Task 2: Implement UI for Each Activity and Fragment

List the subtasks. For example:

- Build UI for questionnaire and question card fragment
- Build UI for Chore List and list item
- Build UI for widget
- Build UI for notification

Task 3: Implement Login/Auth

Setup all necessary code and permissions for user login

Task 4: Set Up Widget

Create widget following example from course

Task 5: Implement Android-Job library and Cloud Messaging

Task 6: Testing

Submission Instructions

1. After you've completed all the sections, download this document as a PDF [File → Download as PDF]
2. Create a new GitHub repo for the capstone. Name it "**Capstone Project**"
3. Add this document to your repo. Make sure it's named "**Capstone_Stage1.pdf**"