

Disney Streaming - Living Room Devices

Roku Engineering

Interview Candidate Assignment 2.0

Exercise #1: Take-Home Coding Assignment

Welcome to Disney Streaming,

We'd like to have you code an implementation of a common use case in the Disney Streaming Living Room Device Engineering group. Please use BrightScript and SceneGraph to complete the exercise. Please do not use 3rd party libraries or frameworks in the packaged code.

Although the assignment is fairly limited in scope, treat it as a feature in a larger, real-world application, where architecture, design patterns and optimized code are all important. Quality is more important than quantity, so good architectural and coding decisions are more important than completing any of the extra credit tasks. Once the assignment is complete, we'll review your work to assess the technical decisions made, and the completeness and quality of the work.

Here's the assignment:

1. Review the requirements below and ask any questions you have.
 - Our intent is not to take too much of your time, so try to scope a solution that can be completed with a reasonable amount of effort
 - In the interview, we can talk about anything you might do differently if given more time
2. Code the example. Feel free to ask any additional questions during this phase.
3. Provide the code for review, either on a code repository (GitHub) or by email, DropBox, etc.
4. Provide instructions on building the app and running it on a device, and any other instructions relevant to your solution.

Data API

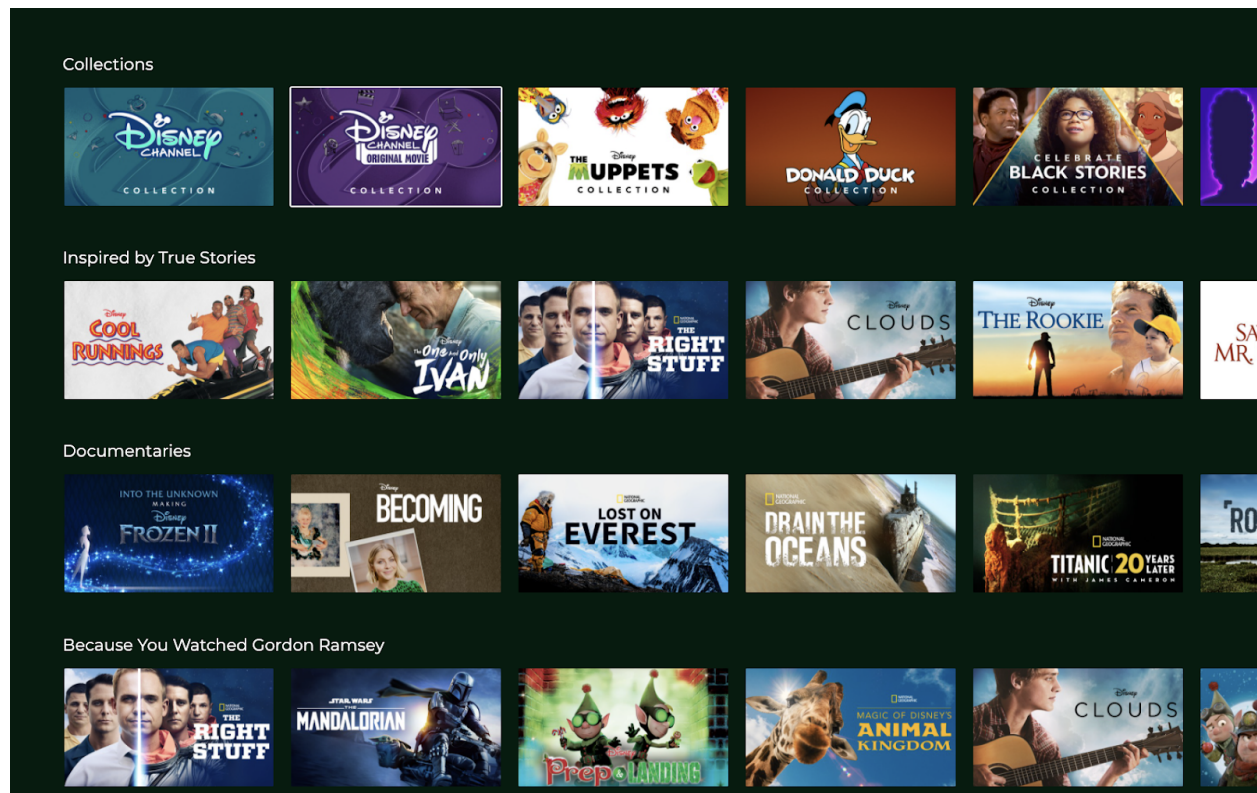
- <https://cd-static.bamgrid.com/dp-117731241344/home.json> will provide data to populate a "Home" page similar to the current Disney+ experience.

- <https://cd-static.bamgrid.com/dp-117731241344/sets/<refId>.json> will provide data for dynamic “ref sets.” The refId will be provided in the home.json.

Requirements

- Create a screen that consumes the home page API and renders the pre-populated data onto the screen.
- Use the 1.78 aspect ratio images for display.
- The focused tile must be scaled up.
- The app should run on any Roku device model still supported by Roku. It’s understandable if you don’t have the means to test on all devices.
- The app should support focus-based navigation with the Roku remote control, e.g. up/down/left/right/OK/etc.
- Minimum layout should display multiple rows of data, but please feel free to add in your own design ideas as well.

Example Layout Idea



Extra Credit

1. Dynamically populate the “ref sets” as they come into view.
2. Allow interaction or selection of a tile. For example, show a modal with data on selection.
3. Incorporate transitions and/or visual aesthetics.
4. Add some Disney magic.