Disney Streaming Services - Connected Device Native Client Engineering

Interview Candidate Assignment

Exercise: Take-Home Coding Assignment

Welcome to Disney Streaming Services!

We'd like to have you code an implementation of a common use case in the Disney Streaming Services Connected Device Engineering group.

Please use <u>ONE</u> of the following technologies to complete the exercise.

Option 1

Standard client-side web stack (HTML, JavaScript, CSS)
- HTML should be rendered on the client rather than server
- You may specify a specific browser that the app targets
- Use of 3rd party libraries or frameworks should be limited. Frameworks such as React or Angular should not be used.

Option 2

JavaScript plus a single, full-screen HTML5 canvas for drawing.

Option 3

WebGL

Assignment

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

1. Review the requirements below and ask any questions you have.
2. Provide an estimate of time to completion. Please estimate both total hours, and the projected completion date.
   a. 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.
   b. In the interview, we will discuss things you might do differently if given more time.
3. Code the example and please feel free to ask any additional questions during this phase.
4. Submit the code for review, either on a code repository or by email, DropBox, etc.
5. Include instructions for running the app.
   a. The simplest instruction might be to provide a URL where the app is hosted.
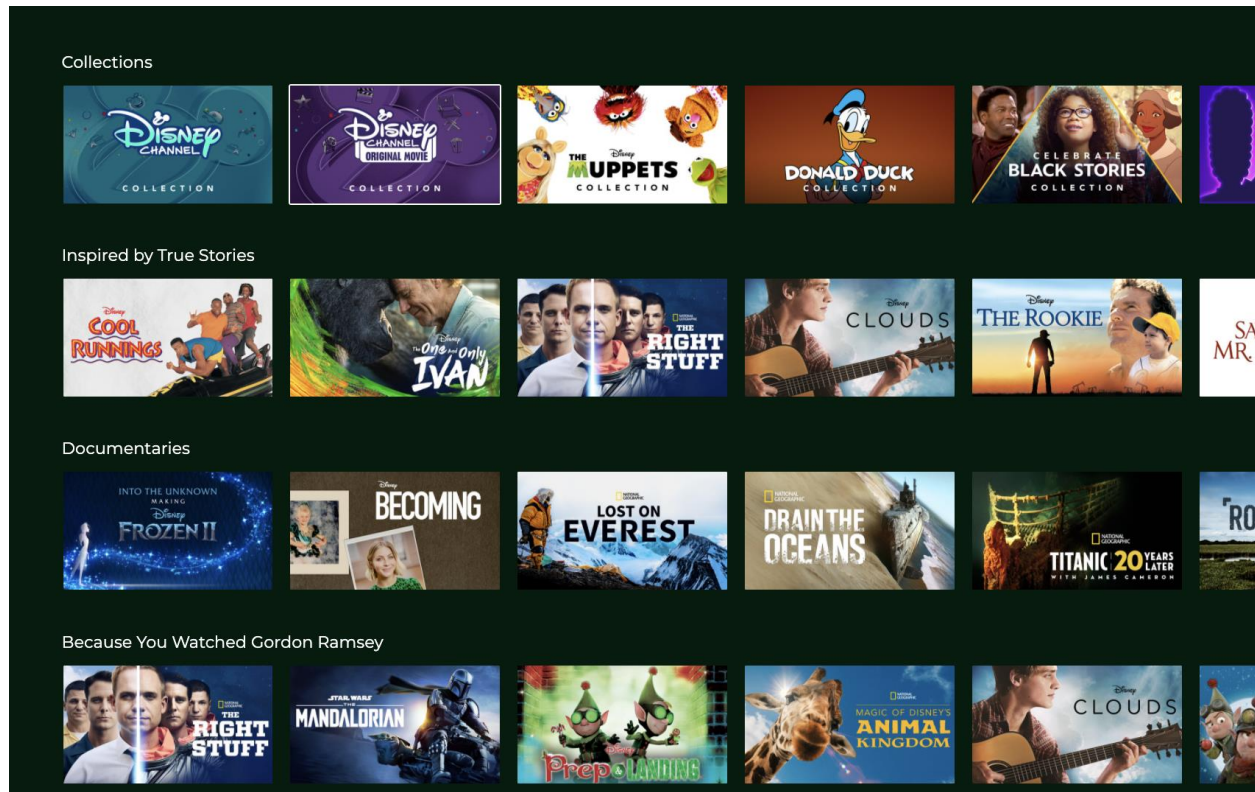   b. If desired, provide installation instructions for running locally including any build scripts if applicable.

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/<ref id>.json will provide data for dynamic "ref" sets. The "ref id" will be provided in the "home.json".

Requirements

- Create a page that consumes the home page API and renders the pre-populated data onto the screen.
- The focused tile must be scaled up.
- The app should support navigation similar to a remote control, e.g. up/down/left/right/enter/back/etc. Avoid mouse input.
- Minimum layout should be 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.