

Your team is working on a new Photos App and you've been tasked with building an initial prototype for conducting user trials. Your team is keen on delighting the user with a good UX that is **intuitive** (most users shouldn't have to guess), **performant** (so that it works well for the Indian market with poor internet conditions), and **responsive** (to cater to smartphones users on the go).

It's important that the code is reasonably extensible as well, so that it's easy to take it from prototype to production later if required.

Requirements:

You have to develop a working prototype for the new Photos app which with the following requirements:-

- UI will have two parts - **Upload** and **View**.

Upload

- User should be able to **upload an image** (JPEG/PNG) from their desktop via the app.
- Upload should support **drag-and-drop** to upload as well as selecting & uploading **multiple files simultaneously**.
- While uploads are in progress, the UI should provide a way to see the **progress percentage**.
- Whenever an upload fails/succeeds, the UI should indicate it to the user clearly.
- The Upload API should **create two renditions of the image** - one with a shorter edge of 240px and another with shorter edge of 720px.
- The uploaded photos can be of any aspect ratio between 9:16 and 16:9 with the shorter edge being at least 1200px.

View

- On page load, the UI should show the latest 30 uploaded images, **with infinite scrolling** (loading more as you scroll). The images should be displayed in the descending order of upload time.
- The UI should list the set of images in a grid **grouped by upload date**. The UI should indicate clear separation between groups of images (each group should probably have its own title and maybe image count).

- There should be an **fullscreen image preview mode**. When a user clicks on an image in the grid, it should open a full-screen preview of the selected image along with the image name and upload date info. The preview should have left and right navigation buttons to show the previous and next image. Bonus points for a smooth transition.

Constraints:

- App has to be web-based. Accessible from any standard desktop browser.
- You can host the app anywhere. Firebase, App Engine, Heroku etc. are all fair game. You could even just write your own little Node.js/Python server yourself for the API.
- You're free to use frameworks like React/Angular etc. but try to implement the major pieces of the assignments yourself. We're really interested in understanding how you go about breaking down requirements and writing your own code (with some helper libraries/functions) to solve them.
- App has to be mobile responsive.