

Images are an important part of enhancing the visual appeal of a web app. Let's incorporate a photo upload feature for users. The 17-minutes video above may be helpful to help you get started. It would be good that you have done research and made some attempts before watching the video so that it serves as a learning consolidation for you. Note that there is no audio for the video.

## Handling Uploads

For image uploading with Rails, we recommend using the following gems:

- [CarrierWave](#)
- [MiniMagick](#)

What's great about Carrierwave is that it has a generator that creates a self-container `uploader` class which houses all the logic for uploading files. Learn how to read CarrierWave's [documentation](#) and how you may implement it.

If you haven't already stumbled upon it, Railscast has heaps of handy step-by-step videos that can help guide you through trouble waters in your Rails journey. For example, check out this [RailsCast on CarrierWave](#) if you get stuck. Do note that while Ryan Bates *is* on hiatus and these railscasts may be a bit dated, a lot of the materials still hold relevance till today.

## Models and Routes

You'll want to incorporate the following for photos:

- A `user` can upload one `profile photo`
- A `listing` can have many `listing photos`

## Styling images

Once you've ensured that your uploader is working swell, incorporate the following styling for your images:

- **Profile photo:** AirBnb has a nice looking circle profile image in the navbar! Display a `user's` profile image in the navbar when they are logged in. Perhaps using the [border-radius](#) element?
- **Incorporate a carousel:** Show tiled images of a `listing's photos` in the `listing` show page. Or better yet, incorporate an image carousel - perhaps using a carousel plugin or Bootstrap's carousel component?
- **Preview image:** Include a preview image for each property in the listing page. Make sure it's responsive!

