MEDIA HOSTING

- We often want to use images, sound, and video in our app.
- The question is where to keep them?
- Images can be kept as part of the server under a directory typically called imgs.

- While you could put the media in your back end database, this can affect the performance and standard mongo/SQL databases are not set up to stream.
- A typical solution is to host the media elsewhere and keep URL links in the database.

- Use a hosting companies
 - Example: Flickr
- Use a CDN (content delivery network). Content is distributed across multiple servers which can help eliminate bottlenecks for providing the content on a page.
 - Static webpages can be cached for faster delivery
 - Usually want to keep the images on a cloud storage and distribute through a CDN for cost effectiveness.
 - Example: Amazon S3 to store the content with a CloudFront CDN

- Audio is intermediate in size between images.
- Can add an audio element which will play mp3, wav and OGG.
 - Include a controls property
- Can use a streaming service to provide the audio.
 - Example: SoundCloud

- Video is trickier. If you don't have much and it isn't very long you can use a live stream platform
 - Example: YouTube, Vimeo
 - Installation usually involves a chunk of HTML that you copy to your page and provides the streamed content.
- Paid Streaming services. Faster with better bandwidth to allow sharing.
 - Example: Livestream
- Live Stream with encoders
 - Streaming can encounter variability in the bandwidth it is being delivered over including breaks or poor connections. Convert from consistent output from a device (video camera) to a form that is better able to handle problems using a hardware or software encoder. Compression and buffering are standard tools.