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Software Capstone

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Design

Hardware

- Dell PowerEdge T320
 - 16 GB RAM
 - 4 TB Storage
 - 8 Cores
- Android phones
 - LG G6
 - Motorola Droid Turbo 1

Software

Our main software we will be using is Android Studio. We will design the majority of the app in it, using Java, XML, and JSON. We will have an SQL database on a remote Apache HTTP server (specified above).

Design

Our app will upload video files and other data to the server using the `HttpURLConnection` class, as Android no longer supports `HttpClient`. We will then have a php script running on the server that waits to receive data from users and stores that data with appropriate ownership, permissions, metadata, etc onto a SQL database. We will use the Android Camera API, `MediaPlayer` class, and `MediaRecorder` class to enable users to record and view videos.

What We Need to Learn

We will need to learn how to send files to a server, and retrieve them. We will have to become more familiar with PHP and SQL in order to handle all of the server-side operations, if that is the optimal solution for our needs. We will need to learn the specific classes very well, in particular `HttpURLConnection` so we can send videos to the server. Also, we have made simple apps in Android Studio before, but this one will be much more involved and have a far steeper learning curve.

