**Problem**
Farmers laboriously monitor their crops for disease, irrigation, and ripeness. Because their results are lost over time and farms base their operation on the success of past harvests, they need a way to contextualize their actions in order to evaluate their effectiveness.

**Why is VinePilot Important?**
Food demand worldwide increases while supply dwindles; VinePilot is important as it allows farmers to spot disease and track progress in order to increase crop output.

**VinePilot** is a platform for farmers to interact with near-infrared data. It allows them to compare various collections of data, note their observations, and send work requests.

**Solution**

**Web**
- Mark Specified Location
- User Defined Regions

**iOS**
- Mosaiqued NDVI Images
- Add Photo to Note

**Server**
- PHP Scripts listen for HTTP Requests
- Saves To
- Loads From

**Step 1:** NDVI images are selected by date, loaded from the database, and overlaid on the map.

**Step 2:** Pins/polygons can be added to highlight problems and regions, each with their own customizable info window.

The **cache** allows:
- Faster access to data
- Potential for offline functionality

**LOCAL STORAGE**:
- Application stores:
  - Marker Location
  - Note Information
  - Images

**GLOBAL STORAGE**:
Synchronize iOS and web data on server