Think Aloud Testing with Farmer Kim

Imaging View Page
- Graphs - The side graph is hard to read visibly
  - Do a listing with numbers beside that does the same as the benchtop app that currently exists from Ground Truth Ag.
  - Have characteristics and weighting, with grades displayed on each graph so the user doesn't get confused about what you're looking at
    - For example: want to see which kernels are damaged
  - Bounding boxes should match the characteristics of the concern (with the same colours)
  - This grade result is for this package of images rather than just one
  - Multiple images per result? - yes but for our purposes these are separate samples.
- In response to the live feature
  - The ability to pause the live view makes sense
  - **Should add a reminder if the user is on pause for too long that the live view is not on in case they forget**

Map View Page
- Creating the path needs to tie in to ground speed + header width
  - Might not be in the first release - needs to be accurate
  - Determined that maybe displaying the path as dots is more valuable
- Filtering
  - Less typing is a priority - dropdown, click, etc
  - Might not use in the combine if too much attention is needed to use
  - Asked about if map filter changes live view - the answer is no but maybe in a future release where you can filter the annotations, this is out of scope for our project
- Team members
  - Follow functionality of overall Ground Truth Agriculture admin for user flow
  - Fine with bottom tab nav - simple
  - Match the theme with the benchtop app

Current grading process
- Combine picks up the sample
- after bin (per bin), take to grain elevator where the sampling process takes place
- The sampling process is visual, and non-visual grading such as moisture test, protein test etc also take place
- Once the grade is determined, the grader calls/texts the farmer about the grade
  - The graders don't tell you grading factors.
  - The farmers either agree with the grade and say "yes, sounds good let's make a contract", or "No" and they give you the sample back.

- - **Saying no: disagree with sample or price, an elevator has different prices**
  - 13,000 acres = 80-100 bins say 5 bins of wheat, take a sample from each and take avg,
- **Contract** - if you don't get samples done (analyzed at the elevator), you **don't have any idea of what's in the bin**.
  - Example: I will contract a #1, 13.5 protein, **you don't get more money for extra but get penalized if the grade is less than the contracted one.**
  - 50 cents to $1 per bushing
  - Need to know what your quality is because can vary between bins/fields,
  - **No way to know right now just based on the past**
  - **Currently, there is no way to know what grade to select for a contract**
    - "Throw a dart at a dartboard" - to select the grade
    - Mostly based on previous years' grade
  - Time to grade: Depends on what the sample looks like - good = easy to grade
    - Snow, frost, weird stuff may make it take longer
    - 15-20 mins per sample
    - Turnaround time of 4 days
      - Depends on crop type - germ test for x for example
  - This app is helpful to be more accurate for future years
  - **Make contracts before, while, and after harvesting bins (all three) to mitigate risk**