

PROJECT SCOPE STATEMENT	
Project Name	Intelligrain
Project Deliverables	Detailed Description
User Login	We must allow multiple logins for each farm. There will be a tablet in each of the combines and one for the farmer. This may include a general account for the combines and one for the farm manager or a unique login for each. There will be different roles assigned to the combines and the farm manager which will give the application different functionalities. We will need to assign roles to different users to allow the different access levels.
Real-time map population (on-combine)	For the tablets on the combine, we must display the state of the grade and the grain properties as the combine progresses and picks up data. This will be a real-time progression line that displays a gradient between green(good), yellow(ok), and red(bad). Each combine will have its own tablet that displays its own progress. This will give drivers a better idea of the trends throughout the field.
Real-time map population (admin)	The admins map (determined by role) will display the sum of data points from all combines as they progress in real time.
Map Filtering	Both on-combine and admin maps will display the data points received. These data points will have the ability to be filtered and display its status(red, yellow, green) for a specific characteristic. This gives both farmers and drivers a better understanding of the field and allow them to make adjustments in real time.
Mobile App (farm manager)	Once the crop is completed (or the data is sent to the cloud for storage), the farm managers app will display the sum data from the combines with the ability to filter by property to get a visual display of the quality of the crop. Analytics will be applied and a gradient of colour will be shown to make the grid easier to understand.
Export Map	Allow the user to export the current view of the grade map. The map can be filtered in a number of ways so the user can export what the map looks like after each of these filters/masks are applied.
Historical Analytics	The farm manager's application will be able to compare with previous years and show trends such as bad spots of the crop so they can decide what processes they need to change in the following year.
Gamification	Provide gamification for the combine drivers to keep them occupied. Might include how good their grade has been in comparison to other combines, targets, badges, distance traveled, etc.

Project Exclusions
<ul style="list-style-type: none">• CV modeling• Desktop application• Benchtop app (separate CV camera that tests the grain in elevator for second approval)• User Profile (allowing the user to select the boundaries of their land, we will automate this for now)