Progress	Risks
 Initial video Ideas (Josh, Jon) Continued work on FAQ page (Rob) Reviewed and completed PRs (Team) 	•
Plans	Needs
 Review pending PRs (Team) Continue in progress solution for ref_data (Josh) Continue testing ref_data changes (Josh) Work on video script (Jon) Having trouble seeing negative values in spectral reflectance graph. Have Josh ask Leah about this (Jacob) Look into bug that occurs when closing an image in the viewing page (Jacob) Check out errors from feedback (Jon) Fix scrolling in batch processing image selection page (Sam) Look at bugs reported by Sahara & Leah (Sam) Begin thinking about content for poster and video (Team) 	We need the preprocessed file from Leah that results in negative values in the spectral reflectance curve graph

March 21th, 2024 - March 28,

Progress	Risks
 Minor updates to Ref Data bugs (Josh) New spectral curve viewer up and working (Jon) Created PR for sorted images display on "Import Images" tab (Rob) Started to grab new screenshots and work on FAQ page for Beyond RGB website (Rob) Merge auto-sort & test fully merged software (Sam) Start writing project description in Technical Report (Sam) 	 Code freeze is coming up quick •

Plans

- Review pending PRs (Team)
- review bugs in PR (Josh)
- Fix merge conflicts to get Spectral Curve PR up(Jon)
- Correct for negative values in spectral curve graph (Jacob)
- Continue testing ref data changes (Josh)
- Continue work on updating Beyond RGB website, including FAQ page (Rob)
- Fix scrolling in batch processing image selection page (Sam)
- Look at bugs reported by Sahara & Leah (Sam)
- Begin thinking about content for poster and video (Team)

Needs

• We need the preprocessed file from Leah that results in negative values in the spectral reflectance curve graph

Van Gogh via the Rainbow, Beyond RGB 2.0

March 7th, 2024 - March 21, 2024

Progress

- Minor updates to Ref Data bugs (Josh)
- New spectral curve viewer up and working (Jon)
- Created PR for sorted images display on "Import Images" tab (Rob)
- Started to grab new screenshots and work on FAQ page for Beyond RGB website (Rob)
- Auto-sort for batch processing (Sam)

Risks

- Code freeze is coming up quick
- •

Plans

- Review pending PRs (Team)
- review bugs in PR (Josh)
- Fix merge conflicts to get Spectral Curve PR up(Jon)
- Correct for negative values in spectral curve graph (Jacob)
- Continue testing ref_data changes (Josh)
- Continue work on updating Beyond RGB website, including FAQ page (Rob)
- Fix scrolling in batch processing image selection page
- Begin thinking about content for poster and video (Team)

Needs

• We need the preprocessed file from Leah that results in negative values in the spectral reflectance curve graph

Progress	Risks
 Merged PR for "Target image on reports page" (Rob) Created Mac Installer (Jon) 90% finished with displaying sorted images on "import images" tab (Rob) 70% done fixing the duplication and incorrect name ref_data bug fix (Josh) Working on writing creativity & excellence award proposals 	 Code freeze is coming up quick Spring break = less work being done
Plans	Needs
 Review pending PRs (Team) reviewbugs in PR (Josh) Get started on displaying measured spectral reflectance (Jon) Try using an exception to stop thread (Jacob) Continue testing ref_data changes (Josh) Get Spectral UI to retrieve proper data (Jon) Set up auto-sort for batch processing (Sam) Finish up work for displaying sorted images on "import images" tab (Rob) Add in cypress tests (Rob) Start on updating documentation/BRGB website page (Rob) 	

February 22nd, 2024 - February 29th, 2024

Progress	Risks
 Worked on debugging ref_data build issues (Josh) Spectral Picker displaying on report (Jon) Sent agenda to Sponsors (Josh) Got Rawspeed installed on Mac (Sam) Do peer evals (Team) Fill out midterm retrospective (Team) Finish target image display on Report page (Rob) 	Mac directory writing issue
Plans	Needs
 Review pending PRs (Team) review build bugs in PR (Josh) Cleanup code for target image on reports page (Rob) Start on new task (Rob) Get started on displaying measured spectral reflectance (Jon) Test out ways to stop a thread in C++ (Jacob) Continue testing ref_data changes (Josh) Get spectral picker UI for target to look nice (Jon) Get spectral picker functionality working (Jon) Set up auto-sort for batch processing (Sam) Write Creativity & excellence award proposals (Sam) 	Weather to be warm again

February 13th 2024 - February 20th 2024

Progress	Risks
 PRed ref_data changes (Josh) Created an updated BeyondRGB 2.0 for testing and use by sponsors Sent agenda to Sponsors (Josh) 	Installing Rawspeed on Mac

 Updated frontend calibration report page to include target image (Rob) Set up Windows installer (Sam) 	
• Fix auto-sort bug (Sam)	
Plans	Needs
• Review pending PRs (Team)	• \$30 for new Puzzle
Do peer evals (Team)	
• Fill out midterm retrospective (Team)	
 Finish target image display on Report page (Rob) 	
 Get started on displaying measured spectral reflectance (Jon) 	
• Figure out if it is possible to stop the processing thread (Jacob)	
 Review and continue testing ref_data changes (Josh) 	
 Set up auto-sort for batch processing (Sam) 	

February 6th 2024 - February 13th 2024

Progress	Risks
 Made PR for report header bug (Rob) Color managed target image being created (Jon) Frontend and backend batch processing merged (Jon) Started on displaying target image in Report page (Rob) Agenda Drafted and sent (Josh) ref_data feature updated (Josh) Merge batch processing backend into frontend and confirm requests are working as expected (Sam & Jon) 	 Figuring out how to create an installer for different OSs Old Mac
Plans	Needs
 Review pending PRs (Team) Finish target image display on Report page (Rob) Work on creating a fully updated 2.0 branch for release (Jon) 	Old Mac

- Fix possible target image and file name issues in batch processing (Jon) Work on backend part of "Stop Processing" button (Jacob) Clean up ref data changes (Josh) Ensure that the ref data folder does not duplicate ref data files when added (Josh)
- Create Batch Processing image auto sorting (Sam)
- macOS build (Josh)
- Fix auto-sort bug (Sam)
- Set up auto-sort for batch processing (Sam)
- Windows build (Team)

Van Gogh via the Rainbow, Beyond RGB 2.0

January 30th 2024 - February 6th 2024

Progress	Risks
 Review Pending PRs (Team) Reviewed the format that the backend requires from the reference data (Josh) Pushed changes to objects such that they now take in a reference Data folder (Josh) Agenda drafted and sent to sponsor (Josh) send multiple requests to the backend in the batch processing flow (Sam) Created PR for "open file location" bug (Rob) Fixed discovered bug causing incorrect R_camera output (Jon) Finished backend work regarding batch processing output and efficiency (Jon) 	Merging together frontend and backend of batch processing
Plans	Needs
 Review pending PRs (Team) Pick up new ticket next week (Rob) Update tab flow to be reactive to batch image selection (Sam) 	Clarification from the sponsor on the backtracking issues

- Create graphs for requirements and defect metrics tracking
- Work on backend part of "Stop Processing" button (Jacob)
- Squash bugs that arose with my ref data changes (Josh)
- Ensure that the ref_data folder does not duplicate ref_data files when added (Josh)
- Work on merging front and backend of batch processing (Jon)
- Start on color calibrating the Target image (Jon)
- Add Cypress to project and write a few tests
- Add documentation to the GitHub for how to setup and run Cypress locally (Jacob)
- Merge batch processing backend into frontend and confirm requests are working as expected (Sam)
- Create Batch Processing image auto sorting (Sam)

January 23th 2024 - January 30th 2024

Progress	Risks
 Backlog Grooming (Team) Created PR for "viewing multiple reports" task (Rob) Narrowed down SpectralCalibration issue to a rounding error (Jon) Completed basic implementation of batch processing efficiency improvements Took a second look at the data files for reference data and analyzed the necessary changes needed (Josh) Agenda drafted and sent to sponsor (Josh) Fixed issue that caused target image to not render in batch processing flow (Sam) 	Returning to project after a month break
Plans	Needs
 Review pending PRs (Team) Start work on "Open File Location" button doing nothing bug (Rob) 	 Clarification from the sponsor about a few of the tickets in our backlog

 Update tab flow to be reactive to batch image selection (Sam) 	
 Create graphs for requirements and defect metrics tracking 	
Make "Stop Processing" button (Jacob)	
• Work on adding custom reference data that will persist through	
runs (Josh)	
• Fix discrepancies in data in output files between initial and batch	
processing runs (Jon)	
 Clean up and organize output files created during batch 	
processing (Jon)	
 Add Cypress to project and write a few tests 	
 Continue working on custom reference data feature (Josh) 	
 Fix processing page image rendering in batch processing flow 	
(Sam)	
 send multiple requests to the backend in the batch processing flow 	
(Sam)	

January 16th 2024 - January 23th 2024

Progress	Risks
Reviewed plan for this semester and set code freeze date (Team)	 Returning to project after a month break
Plans	Needs
 Backlog Grooming (Team) Create PR for "viewing multiple reports" task (Rob) Review pending PRs (Team) Update tab flow to be reactive to batch image selection (Sam) Create graphs for requirements and defect metrics tracking Make "Stop Processing" button (Jacob) Work on adding custom reference data that will persist through runs (Josh) 	

Get frontend to send necessary data pathfiles to backend for batch (Jon)
 Determine which output files are incorrect during batch processing and fix them (Jon)
 Apply improved batch processing efficiency to Spectral Processing (Jon)

Van Gogh via the Rainbow, Beyond RGB 2.0

November 16th 2023 - November 23th 2023

Progress	Risks
 Finalized Script for video (Team) Shot footage for video (Team) Created button to create a secondary child window of the application(Rob) Add "create new window" button to Reports page (Rob) 	 End of semester stressed from other classes Thanksgiving break dividing momentum Time split between development work and other end of semester deliverables needed Unforseen C++ and svelte complexities
Plans • Look into alternate methods of greating window/tab limiting user	Needs
 Look into alternate methods of creating window/tab, limiting user functionality (Rob) Review pending PRs (Team) Update tab flow to be reactive to batch image selection(Sam) Create graphs for requirements and defect metrics tracking Make "Stop Processing" button (Jacob) Work on adding custom reference data that will persist through runs (Josh) Script work for the video (Josh) Primary shots for video (Josh) Get backend to re-use the other data it needs during batch such as color patch avgs (Jon) Get frontend to send necessary data pathfiles to backend for batch (Jon) Apply improved batch processing efficiency to Spectral Processing (Jon) 	

November 9th 2023 - November 16th

Progress

- Environment setup on alternate PC and vcpkg manifest figured out (Jon)
- Updated select image page to not have standard buttons(Sam)
- Started looking into solutions for multiple tabs for displaying multiple reports (Rob)
- Improved efficiency for batch image pre-processing (Jon)
- Fixed issue with target overlay when backtracking (Jacob)
- Reconstructed the reference data options to account for custom references (Josh)
- Made the extended list of reference data persist over multiple runs (Josh)
- Video proposal discussion (Team)
- Got backend to take in and re-use M and Offset data for batch processing (Jon)

Risks

- End of semester stressed from other classes
- Thanksgiving break dividing momentum
- Time split between development work and other end of semester deliverables needed
- Unforseen C++ and svelte complexities

Plans

- Update tab flow to be reactive to batch image selection(Sam)
- Create graphs for requirements and defect metrics tracking
- Make "Stop Processing" button (Jacob)
- Ability to create a simple secondary view of Reports within the same electron application (Rob)
- Work on adding custom reference data that will persist through runs (Josh)
- Run through a Udemy C++ course (Josh)
- Script work for the video (Josh)
- Primary shots for video (Josh)
- Get backend to re-use the other data it needs during batch such as color patch avgs (Jon)
- Get frontend to send necessary data pathfiles to backend for batch (Jon)

Needs

•

November 2nd 2023 - November 9th 2023

Progress	Risks
 Created Figma for proposed frontend changes(Sam) Learned more about the backend and developed a plan for efficient batch processing (Jon) Wrote document to opt into Sr project awards (Sam) Worked on script for demo video (Team) Added libraries to help convert TIFF to JPEG2000 (Rob) Added new page to allow user to select Batch processing or Single Image Processing (Sam) 	 Multiple people working on batch processing could lead to merge conflicts Laptop cannot handle running the software, PC having issues getting environment set up, need to figure out a way to test better (Jon)
Plans	Needs
 Create a jpeg2000 either through javascript or c++ (Rob) Add new page on the frontend to upload images for batch processing (Sam) Get environment to work on other, more powerful computer (Jon) Get backend to process files using preset M and offset data (Jon) Make "Stop Processing" button (Jacob) Add everyone to project website organization (Jacob) Work on improving efficiency of batch processing (Jon) Have all batch processed images output to the same folder (Jon) Work on adding custom reference data that will persist through runs (Josh) Script work for the video (Josh) 	Additional custom reference data if possible

Progress	Risks
 Updated graph to show actual and expected values (Sam) Started on what is needed for jpeg2000 image file creation (Rob) Target patch shows up correctly after backtracking from error (Jacob) Implemented a basic way of doing batch processing (Jon) 	Multiple people working on batch processing could lead to merge conflicts
Plans	Needs
 Create a jpeg2000 through the backend (Rob) Add new page on the frontend to upload images for batch processing (Sam) Make "Stop Processing" button (Jacob) Add everyone to project website organization (Jacob) Create Figma for proposed frontend changes(Sam) Write document to opt into Sr project awards (Sam) Work on improving efficiency of batch processing (Jon) Have all batch processed images output to the same folder (Jon) 	Additional custom reference data if possible

October 19th 2023 - October 26th 2023

Progress	Risks
 Sent instructions for Rawspeed(Sam) Investigated the graphing libraries used on the front end (Sam) Got system to process multiple images in a row (Jon) Initial ideas for how to implement batch processing (Jon) Discussions about deliverables for this semester (Team) Environment fixed (Josh) 	• HALLOWEEN MEETING?! OOKY SPOOKY o Alt text: Halloween meeting?! ooky spooky

Plans

- Sprint 2 (Team)
- Update graphs to have different icons for expected and actual
- Attempt to get system to process multiple images in a row (Jon)
- Create more formal plan for batch processing (Jon)
- Work on choice of output image file format task (Rob)
- Review all PR's (Team)
- Finish backtracking functionality (Jacob)
- Organize more thoughtful Error messages (Josh)

Needs

- Info Session on BeyondRGB under the hood
- Additional test data for batch processing
 - Multiple art images with the same target, flatfield and darkfield images

Van Gogh via the Rainbow, Beyond RGB 2.0

October 12th 2023 - October 19th 2023

Progress

- Rawspeed running on Sam's machine (Sam)
- Finished work on reflectance csv update, awaiting code review (Rob)
- Investigated the "outOfMemory" error (Josh)
- Fully finished Target Coordinate task (Jon)
- Started investigation into batch processing viability (Jon)
- Finished most of backtracking task (Jacob)
- Filed out midterm retrospective sheet (Team)

Risks

- Figuring out what direction to take with batch processing
 - o Parse C++ code and implement batch
 - o Hook Python up to Frontend and fix calibration
- Environment set up continues to be an issue, some team members found that the build breaks after multiple tries

Plans

- Clarify what sponsor wants for backtracking functionality (Jacob)
- Clarify acceptance criteria for the stop processing button functionality (Josh)
- Do code reviews and merge PRs for first sprint
- Break down batch processing into smaller steps (Team)
- Start work on updating marker shape in scatter plots (Sam)

Needs

- Ensure the correct version of a package is installed
- Info Session on BeyondRGB under the hood

occurred. (Josh)

October 5th 2023 - October 12th 2023

Progress	Risks
 Began work on Reflectance CSV update (Rob) Concern: Reflectance CSV may end up having two columns of data, one for values 0-1, another 0-100; (other solution is to add a different UI component) Began work on getting RawSpeed working (Sam) Basic implementation of Target Coordinates working (Jon) Began work on updating the output logs, giving the user more verbose (and current) output (Josh) 	 Figuring out what direction to take with batch processing Parse C++ code and implement batch Hook Python up to Frontend and fix calibration Rawspeed not working properly - Almost fixed! Lack of motivation during break and because of midterms
Plans	Needs
 All team members to individually fill out and review Midterm Evaluation doc Figure out how to compile RawSpeed as a library and add it to libraw (Sam) Fix issues with back button when setting up image processing (Jacob) Update project website. Work on setting up scheduled deployments (Jacob) Finish up Target Coordinates: Make look nicer, apply to Verify target, look into units (Jon) Finish Reflectance CSV story (Rob) Update the error logs so that the users can find where the errors 	Info session on BeyondRGB under the hood

September 28 2023 - October 5th 2023

Progress	Risks
 Set up dev branch (Rob) Delegated stories (Team) Finish Final Plan (Team) All dev environments running properly (sans rawspeed) (Team) 	 Figuring out what direction to take with batch processing Parse C++ code and implement batch Hook Python up to Frontend and fix calibration Rawspeed not working properly Concerns on ability to get stories done in one sprint Concerns on ability to estimate story effort with low codebase knowledge
 Plans Begin work on Color Calibration story (Jon) Begin work on Reflectance CSV update (Rob) Begin work on frontend backtracking story (Jacob) Begin work on "Out of memory error readability" story (Josh) 	 Sam to determine which story she wants to work on Each team member needs to set up their own dev branch off of beyond_rgb_2.0 To log any errors, bugs, and unreadable error messages, including steps to reproduce, as they are encountered (Leah and Susan)

Van Gogh via the Rainbow, Beyond RGB 2.0 2023

September 21th 2023 - September 28th

Progress	Risks
 Set up team project board (Sam) Create Development Methodology deliverable (Sam) Project website created (Jacob) Created agenda for Tuesday (Team) Created Domain Model deliverable (Jon) Created Process and Project Metrics deliverable (Jon) Planned out possible solution for calibration instability (Jon) Updated Final Plan Document (Team) 	 Figuring out what direction to take with batch processing Parse C++ code and implement batch Hook Python up to Frontend and fix calibration Sam will be out for Grace Hopper Conference 9/26 & 9/28 Rawspeed not working properly Access to GitHub
Plans	Needs
 Delegate (and review) user stories for the first sprint, so everyone gets familiar with code base Create Final Plan (Team) Create Milestones and Deliverables (Jon) Get Rawspeed to work 	Access to Github Repo

September 14th 2023 - September 20th

Progress	Risks
 Got C++ and javascript projects built and running Working on setting up both projects locally (Jacob) Investigated calibration instability (Jon) 	 Project is split between C++ and Python releases Sam will be out for Grace Hopper Conference 9/26 & 9/28 Low Team Experience with C++ Rawspeed not working properly
Plans	Needs
 Set up team project board (Sam) Create Github Pages website (Jacob) Create Development Methodology deliverable (Sam) Create Domain Model deliverable (Jon) 	 Access to Github Repo Access to Google drive from Sponsor

Create Process and Project Metrics deliverable (Jon)	
 Write project synopsis (Rob) 	
Finalize tools and techniques and submit deliverable	

September 5th 2023 - September 14th 2023

Progress	Risks
 First sponsor meeting (Team) Send out weekly agenda(Josh) Completed team activity Understand requirement priorities (Team) Established Team Roles (Team) 	 Project is split between C++ and Python releases Sam will be out for Grace Hopper Conference 9/26 & 9/28 Low Team Experience with C++
Plans	Needs
 Get backend and frontend to build completely(Team) Start up a backlog (Team), first need to be added as members to repo Create more questions to ask the Sponsor (Team) Set-up Team website (Team) 	 Access to Github Repo Access to Data drive from Sponsor