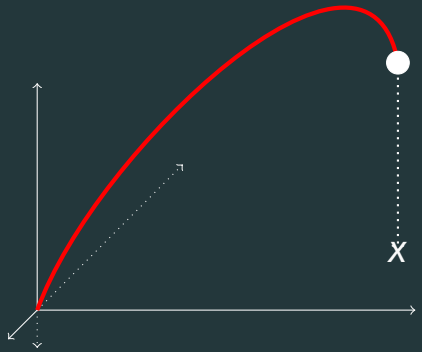


RV3K

Team RV3K

CS Capstone 2017 — Rocket View 3000

Sponsor: Andrew Greenberg, Portland State Aerospace Society

Amanda Murphy, Jeff Patterson, Patrick Overton, Matt Tighe, Yun Cong Chen, Seth Amundsen, Paolo Villanueva, Michael Ohl, Connor Picken

March 21, 2017

Portland State University
Maseeh College of Engineering and Computer Science

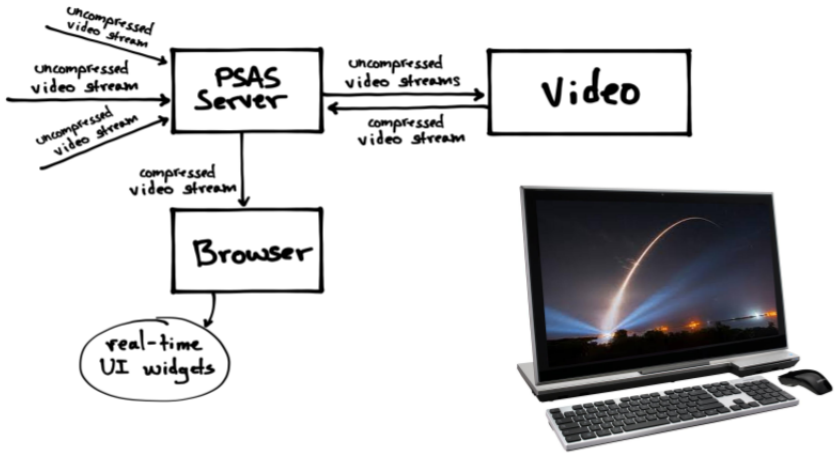
Introduction

- Product
  - Product Features
  - Assumptions and constraints
- Process, schedule, and deliverables
- Risk analysis: across iterations
- What we learned

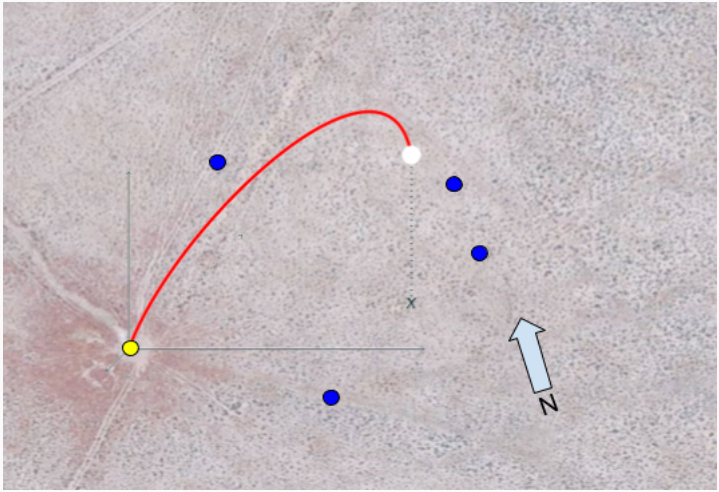
What is RV3K?

Features

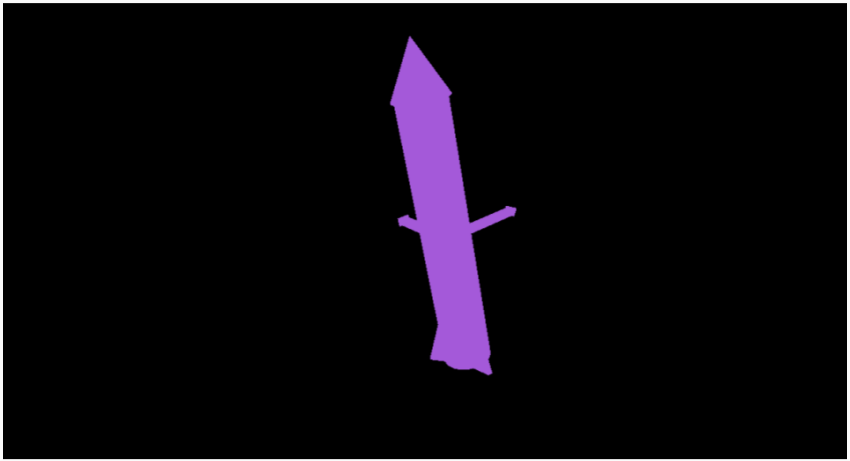
Features: Video Display



Features: Earth Frame View

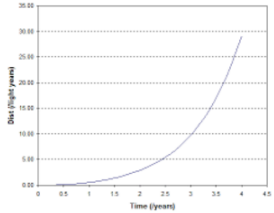


Features: Vehicle attitude view

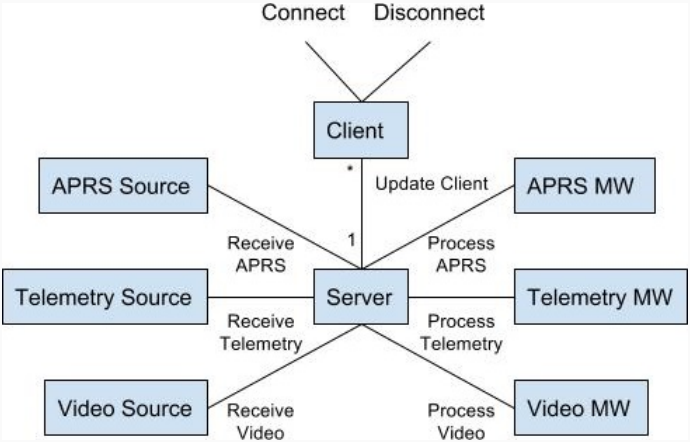


Video

Features: Telemetry data



Features: Server



Features: Instrumentation and logging

- Purpose
  - To facilitate debugging traceability, and configuration
- Functionality
  - Logs connection status, errors, and relevent events

Assumptions & Constraints

Process and Schedule

Planned Process	Actual Process	Planned Schedule	Actual Schedule
Project Plan	Same	Weekly	3 iterations
Requirements Elicitation	Same	week 0 to Feb 18th	March 7
Risk Plan	Same	ongoing	ongoing
SRS/License Agreement	Same	Feb 7 - Feb 18	Feb 7 - March 14
SDD	SDD draft	Feb 18 - March 20	Feb 21 - March 13

Used Trello and GitHub Issues/Milestones/Projects to track tasks

Process and Schedule: Term 2

Estimated Capacity

864 hours

+ 216 hours of slack time

(96 hours per person)

Back End

396 hours

+

Front End

468 hours

With tasks broken down into 1 hour long pieces.

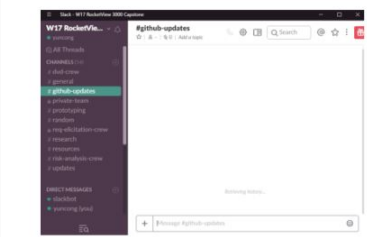
Term 1 Deliverables

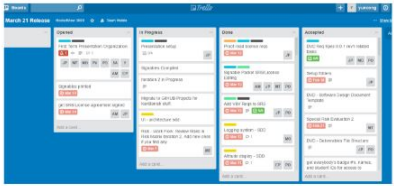
- Project Plan
- Risk Management Plan
- Software Requirements Specification
- License Agreement
- SDD draft

Risk Analysis

Lessons Learned

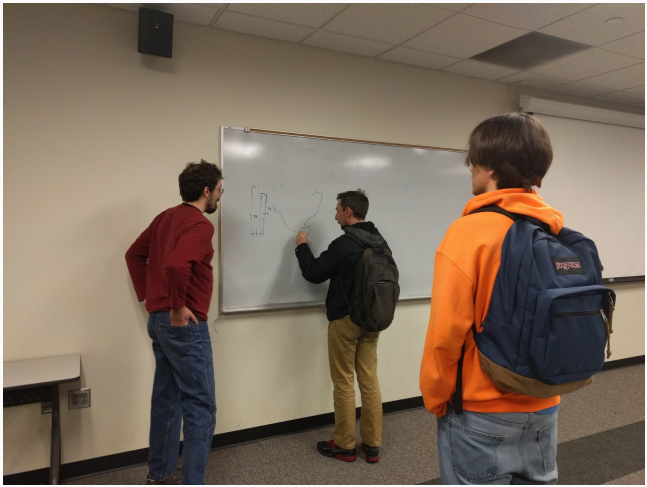
Lessons: Collaboration with GitHub / Working as a Team





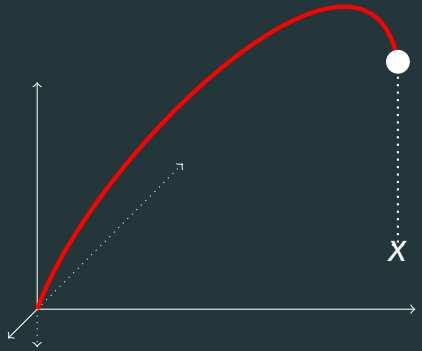
17
18
develop
develop
develop

Lessons: Working with Sponsors



Lessons: PSAS Community

Thank You!



RV3K