



Project Glacier

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Team Ice Breaker

Agenda

- Project Overview
- Requirements Elicitation
- Process
- Metrics
- Risk Analysis
- Project Design
- Demo
- Team Reflection



Project Overview

- Data Visualization App
- New version forthcoming
 - Has browser frontend
 - JS logic



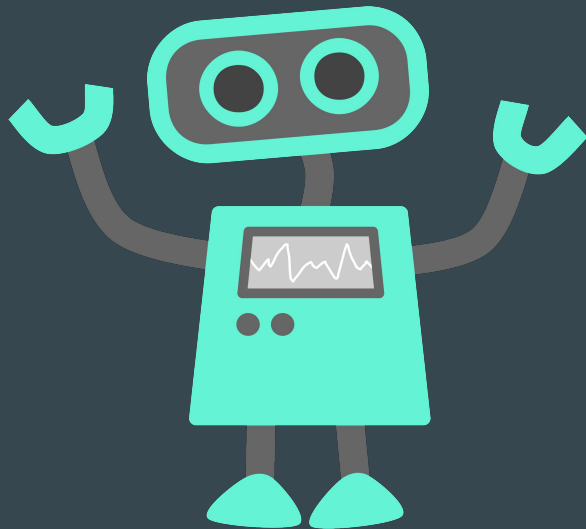
Requirements Elicitation

- Analysis of existing application
 - Evaluated technologies used
- Defined project requirements and scope
 - Sponsor was flexible on initial scope
- Creation of Use Cases
- Task Prioritization



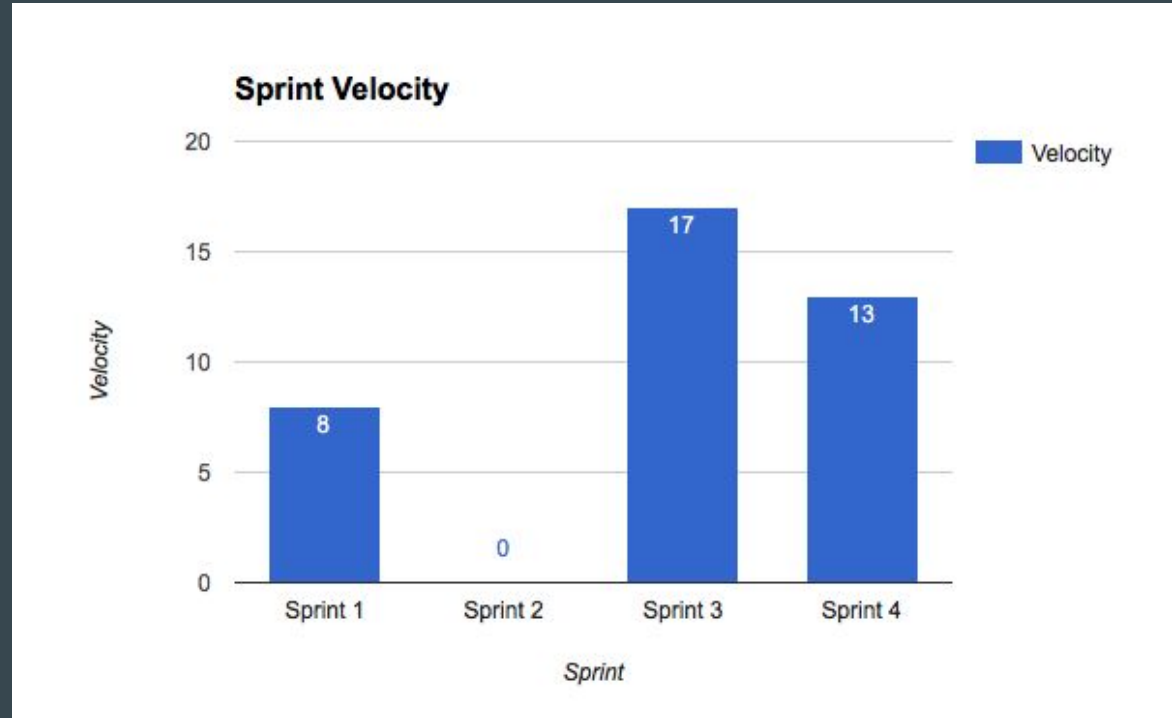
Scrum

- Scheduled Scrums
 - Slack bot (“Howdy”)
 - Quick and effective
 - The three scrum questions
 - Captured developer happiness
- Two week Sprints
 - Planning Poker
 - Retrospective
 - Backlog grooming



Project Velocity

- Underestimated initial ramp time
- External dependencies impacted velocity
- Sprint 2 - 0 velocity
gasp



Developer Happiness

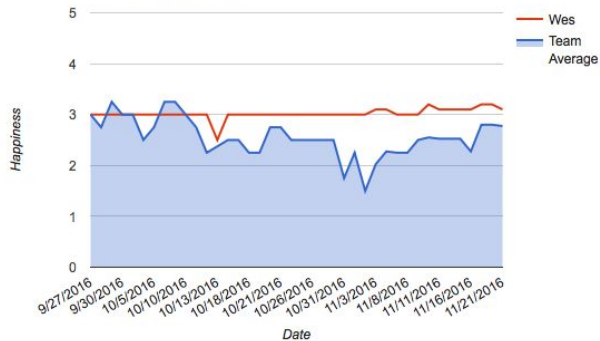
Steve's Happiness



Colin's Happiness



Wes's Happiness



Zach's Happiness



Risk Analysis

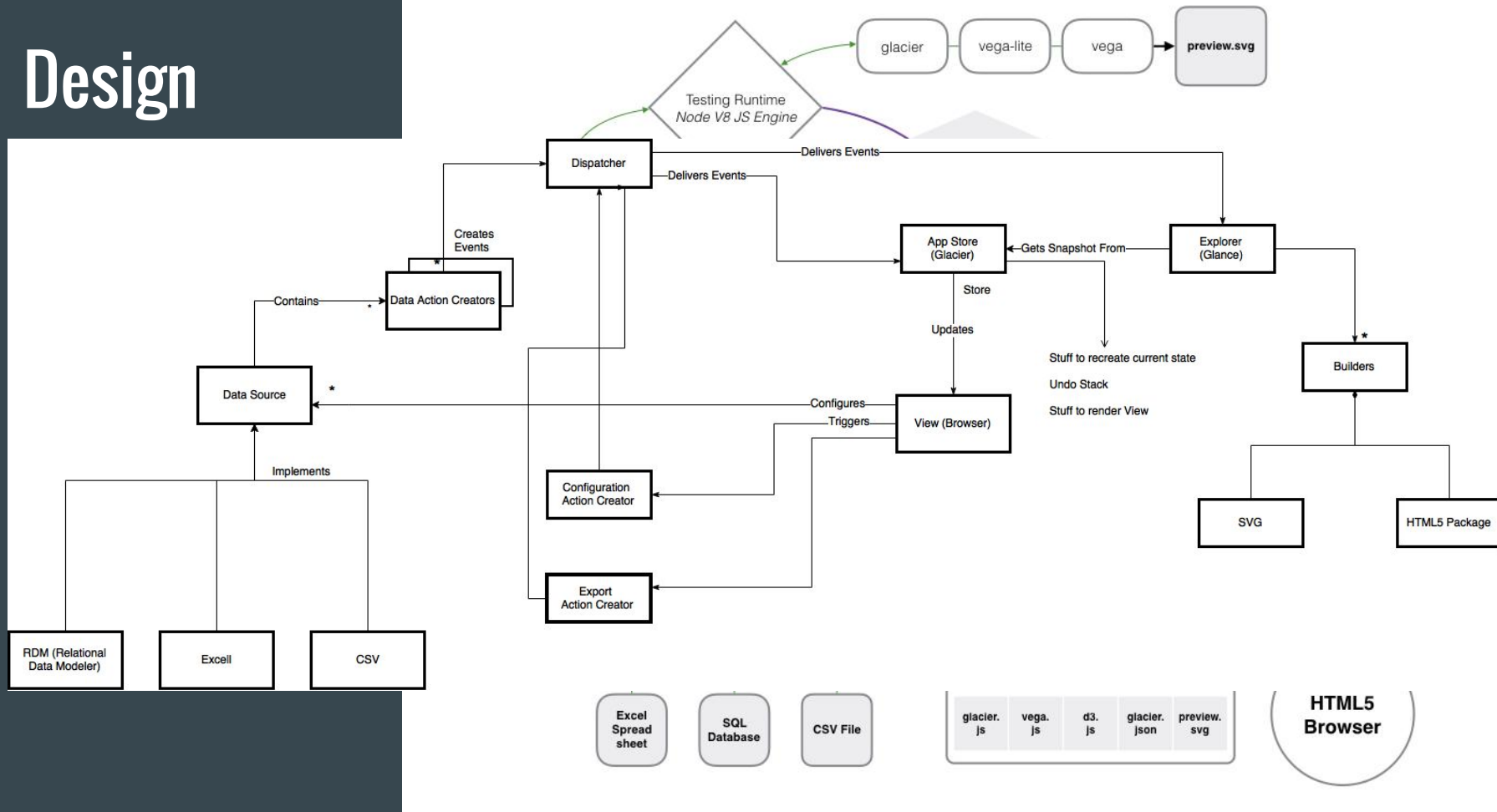
Risk	Exposure	Mitigation plan
External dependencies that are constantly changing	6	Monitor dependencies and update project as needed
Ineffective team communication	5	Use communication tools that are in place to communicate issues as they arise
Loss of development time due to the holiday season	5	Complete as much work as possible before the holiday season, plan to complete any outstanding work during or shortly after break
Slow pull requests on open source software	4	If pull requests can not be reviewed in a timely manner, fork the branch and create a custom package for use in the project.

Technology Overview

- Vega / Vega-lite
- JavaScript
- TypeScript



Design



Testing

- Comprehensive test plan
 - Pull requests require passing tests
- Continuous testing
 - Travis
- Acceptance tests
 - Visual output



Demo

- <http://glimpseio.github.io/glacier>

What has been problematic

- Time management
- Underestimated ramp-up period
- Managing schedules
- Team communication



What went well

- Requirements elicitation
- Scrums
- GitHub code reviews
- Managing project scope
- Testing



Lessons Learned

- Originally had a overly complex testing strategy
- Learning new technology takes time - and it's difficult to estimate that
 - JavaScript
 - Typescript
 - Electron
- Managing relationship with sponsor
 - Expectations
 - Technical Choices
 - Deadlines

Questions

