

## The Mathworks

**Role**  
Lead User Experience Specialist for this project

**Key Focus Areas**  
User Research, Content Strategy, Usability, Interaction Design

**Overview**  
SegV stands for Segmentation Violation.

During a Matlab crash, system prompts the user to send crash log to the system. Once the log is received, a group of frames go through a pattern matching algorithm. If they find 10 or more similar stack traces a SegV geck is created. This data was unconsumable because of disconnected UX/UI.

I was responsible for the enhancement of this subset of SegV User Interface that is being used by the internal users.

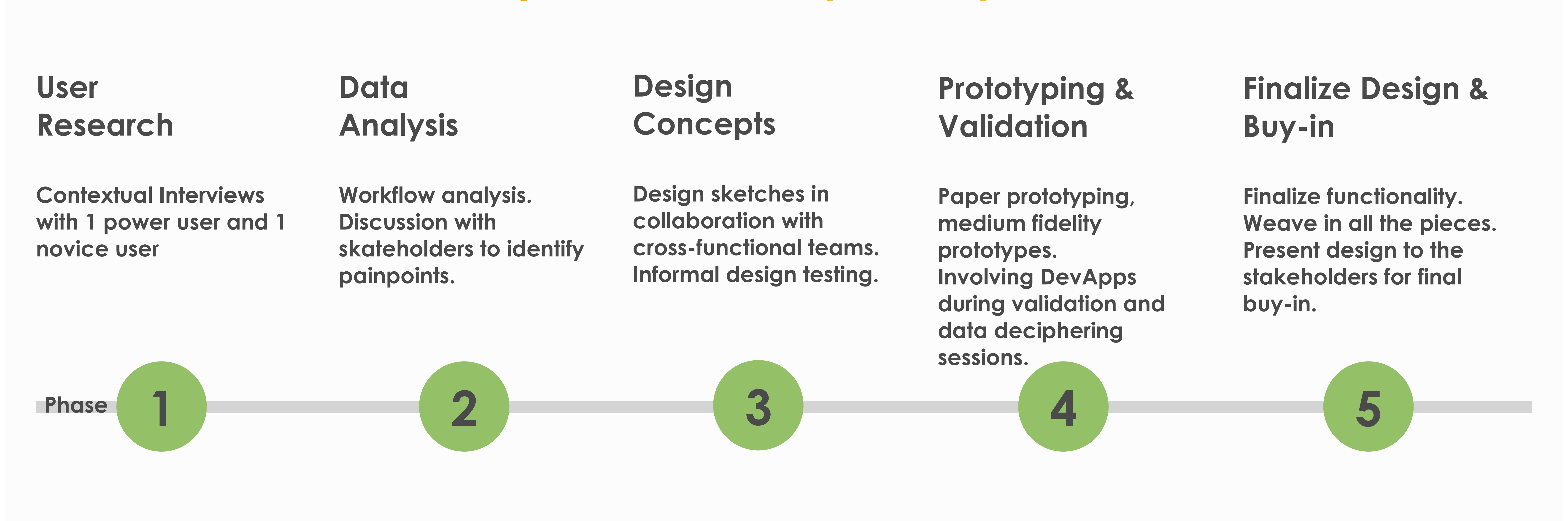
## Problem Statement

Only 3% of all customer issues were resolved as a result of disconnected resources and unconsumable bug related data.

Lack of bi-directional connectivity between SegV UI and geck page.

Developers looking for ways to reproduce and resolve the geck.

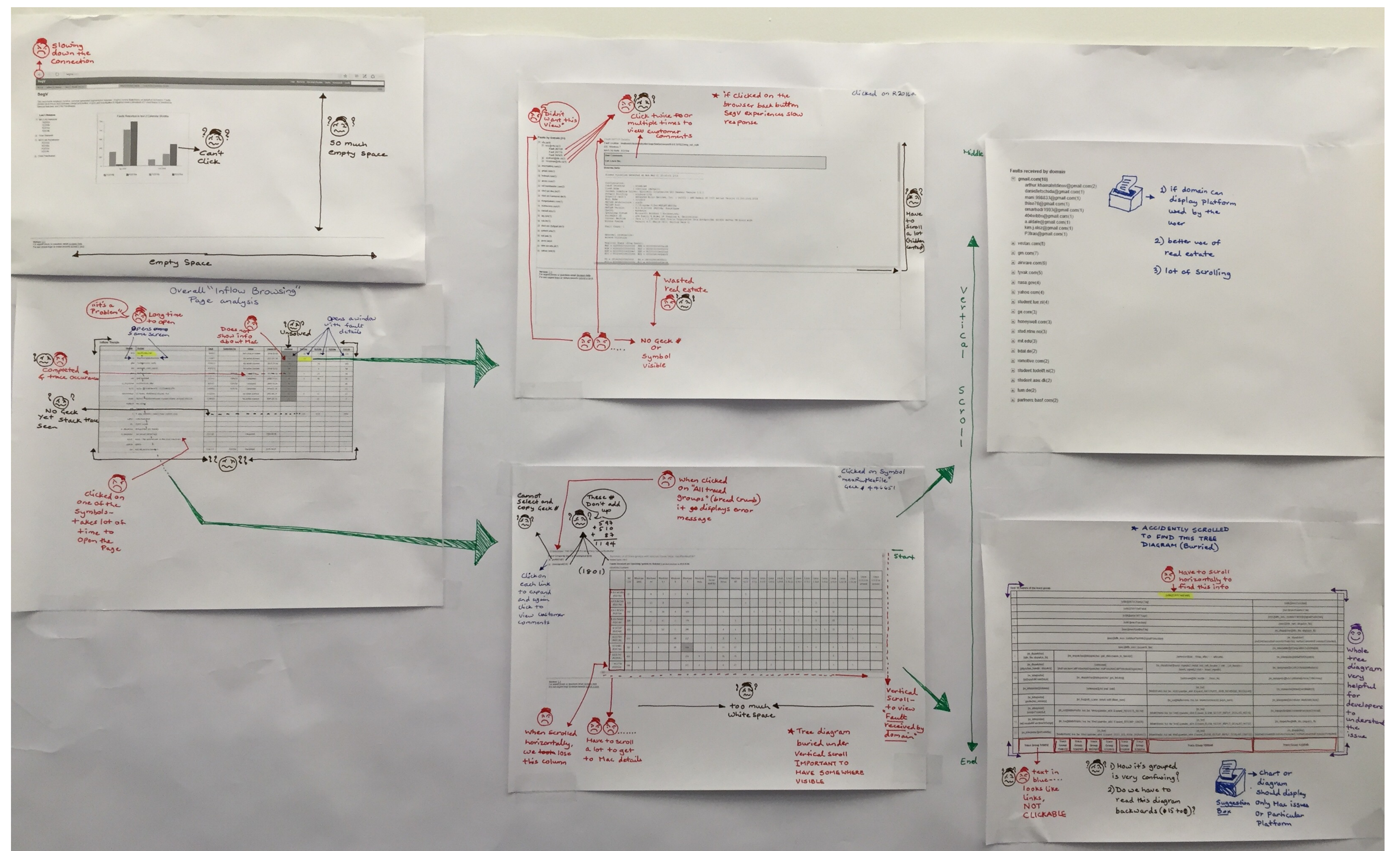
## Project Process - April - July, 2016



## User Research - Contextual Interviews

### User Comments -

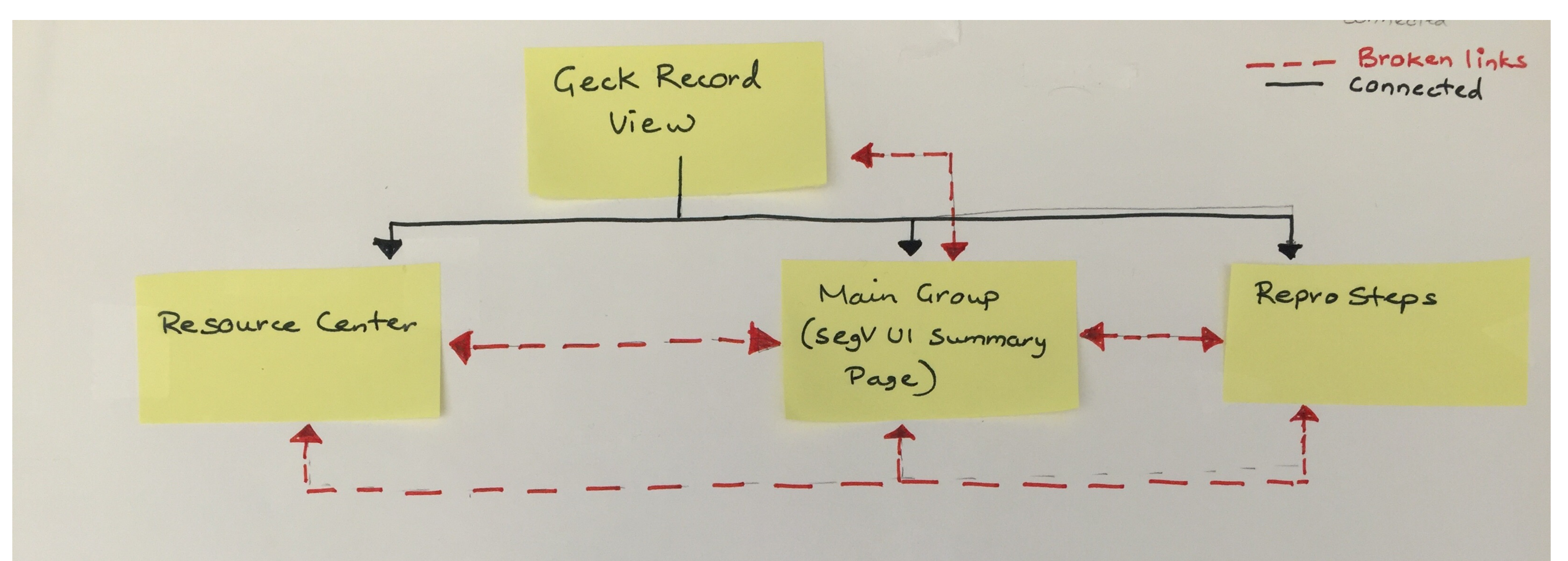
- "No geck, yet stacktrace"
- "When clicked on All traced group (bread crumbs) it displays error message"
- "These numbers don't add up"
- "Have to scroll horizontally to find info about the sequencing of events before the crash"



## Content Strategy

### Streamline Content to Resolve Issues -

- Domain address
- Customer comments
- Bug #
- Release version
- OS platform



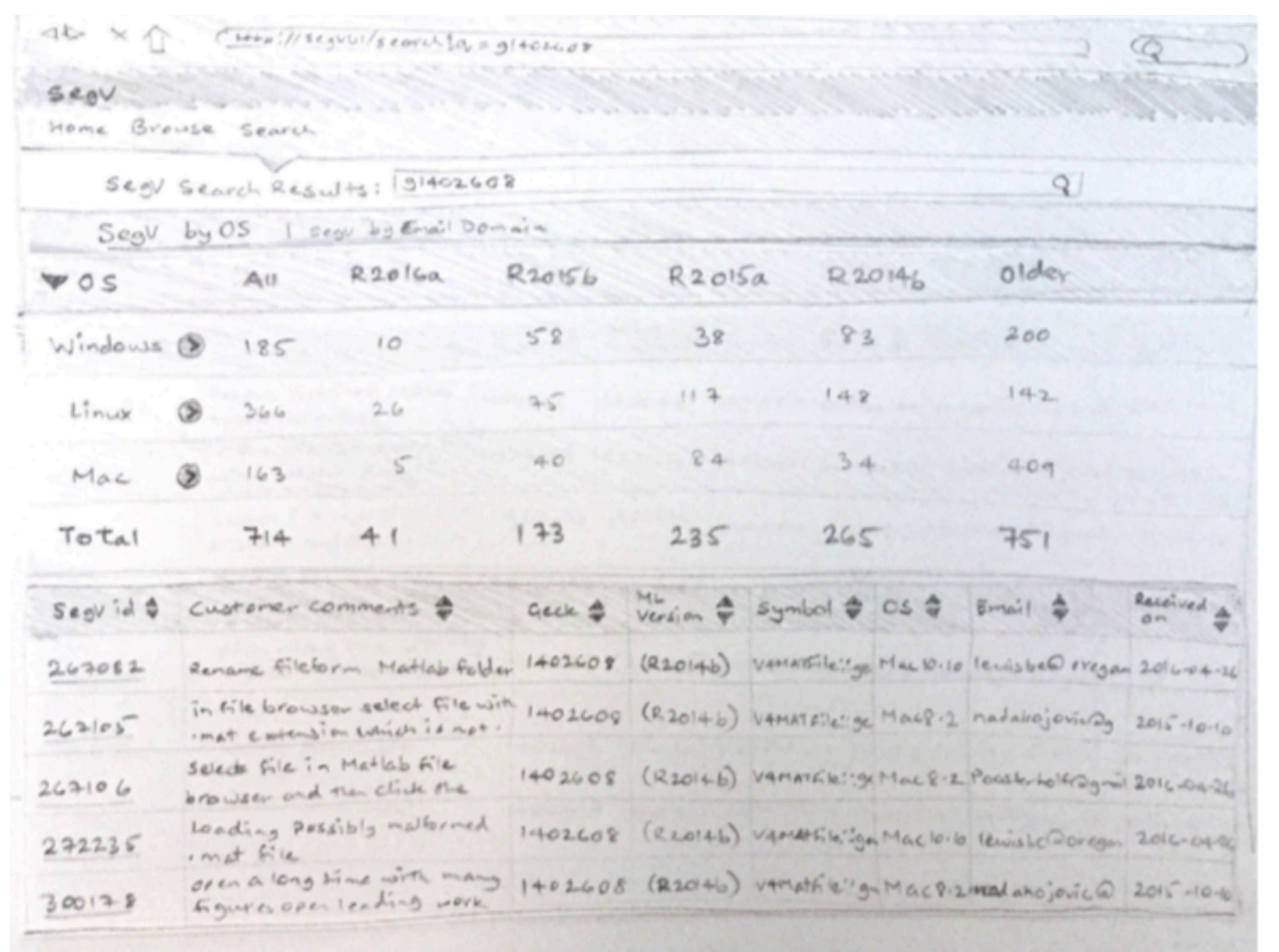
## Usability - Paper Prototype, Low Fidelity

### Paper Prototype -

Multiple rounds of informal and formal prototype testing.

### Study quotes -

- "I am looking for customer comments, they are most important"
- "Email domain is next thing I look at"



## Recommendation

### Bill York -

"Shilpa led our team through a redesign of an internal UI for crash report navigation. She started with a collection of workflow pictures that captured interesting & humorous details. These were so well received, we referred to them throughout the project as "The Scrolls". She is a pleasure to work with & has excellent UI & people skills."

### Irene Greenberg -

"Shilpa provided UX design services on a project I managed. Upon joining, she immediately became a part of the team, engaging deeply to solve problems. She showed quick initiative by reaching out to our customer base to learn more about how they use the system, documented their workflow in the most creative and effective way I have ever seen, and designed a wireframe solution that she put through usability tests. The improvements she made delighted the user base; equally important for me as a PM in this effort was how easily Shilpa was able to become a part of the team, how well she engaged with the users, how quickly she was able to articulate the workflow roadblocks, and how creatively she solved problems. Shilpa was a delight to work with!"

## Key Take Away

### Collaboration -

- Effort reduction: project closure 3 weeks prior to deadline
- Risk analysis: avoided feature creep
- Risk mitigation: saved time and money

### Implementing Design Process -

- Effective communication: reduced number of design iterations
- Prototyping: timely user feedback to move to higher fidelity
- User testing: user feedback resulted in enhanced user experience