

**MICHIGAN STATE**  

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**U N I V E R S I T Y**

# Project Plan

## Groupwork for Google Chrome

### The Capstone Experience

Team TechSmith

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Justin Fila

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Michigan State University

Fall 2014



*From Students...  
...to Professionals*

# Project Overview

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- Removal of barriers to communication
- Enable intuitive group collaboration and project organization
- GroupWork will reside as a layer on top of Google Drive

# Functional Specifications

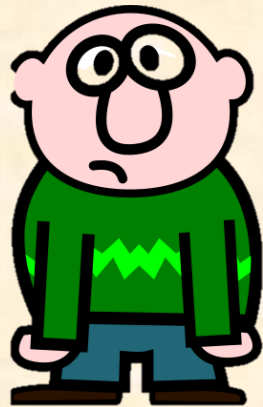
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- Facilitate projects using content from Snagit for Chrome.
- Form Groups and Projects
- Assign tasks to group members
- Forum-Style chat
- Notifications



# Design Specifications

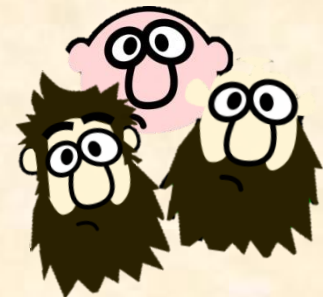
- How will somebody actually use this?
- A scenario:



*Joe*



*GroupWork*



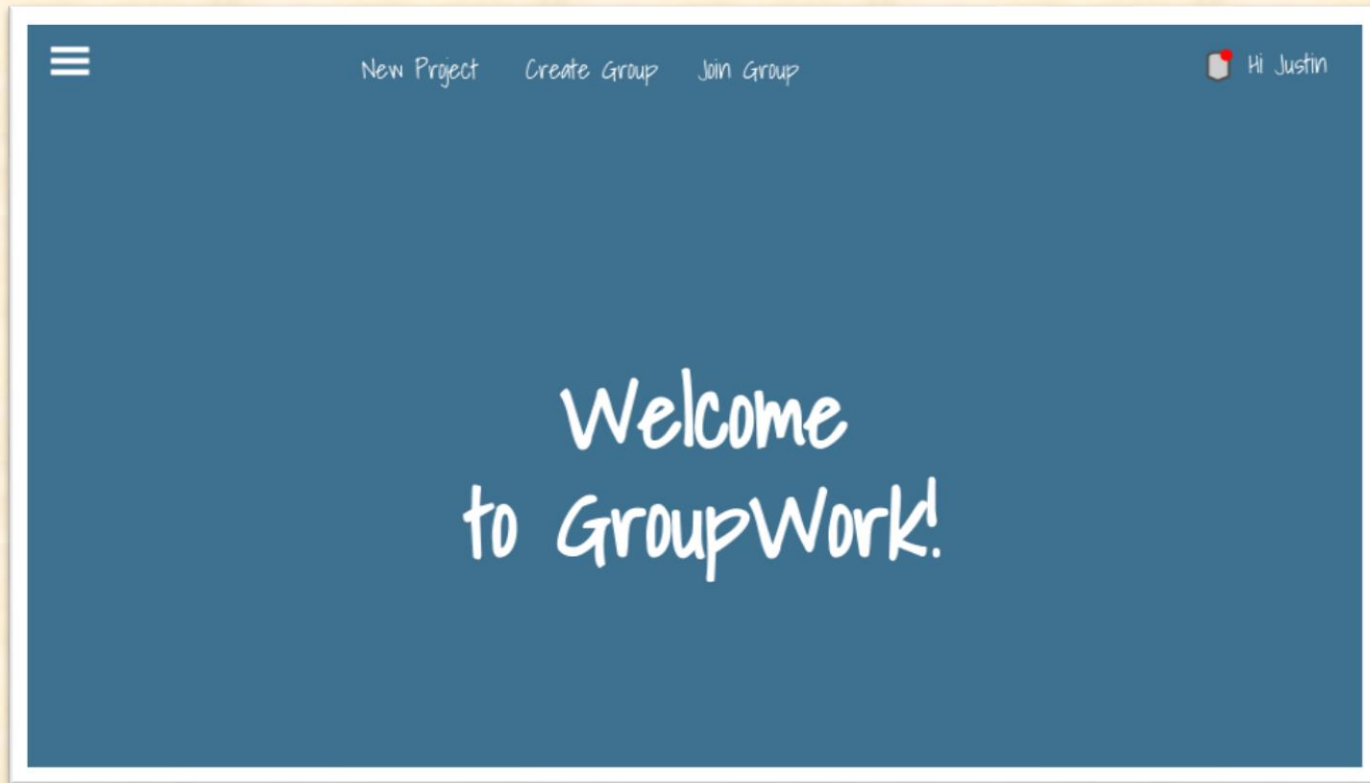
*Joe's Group*



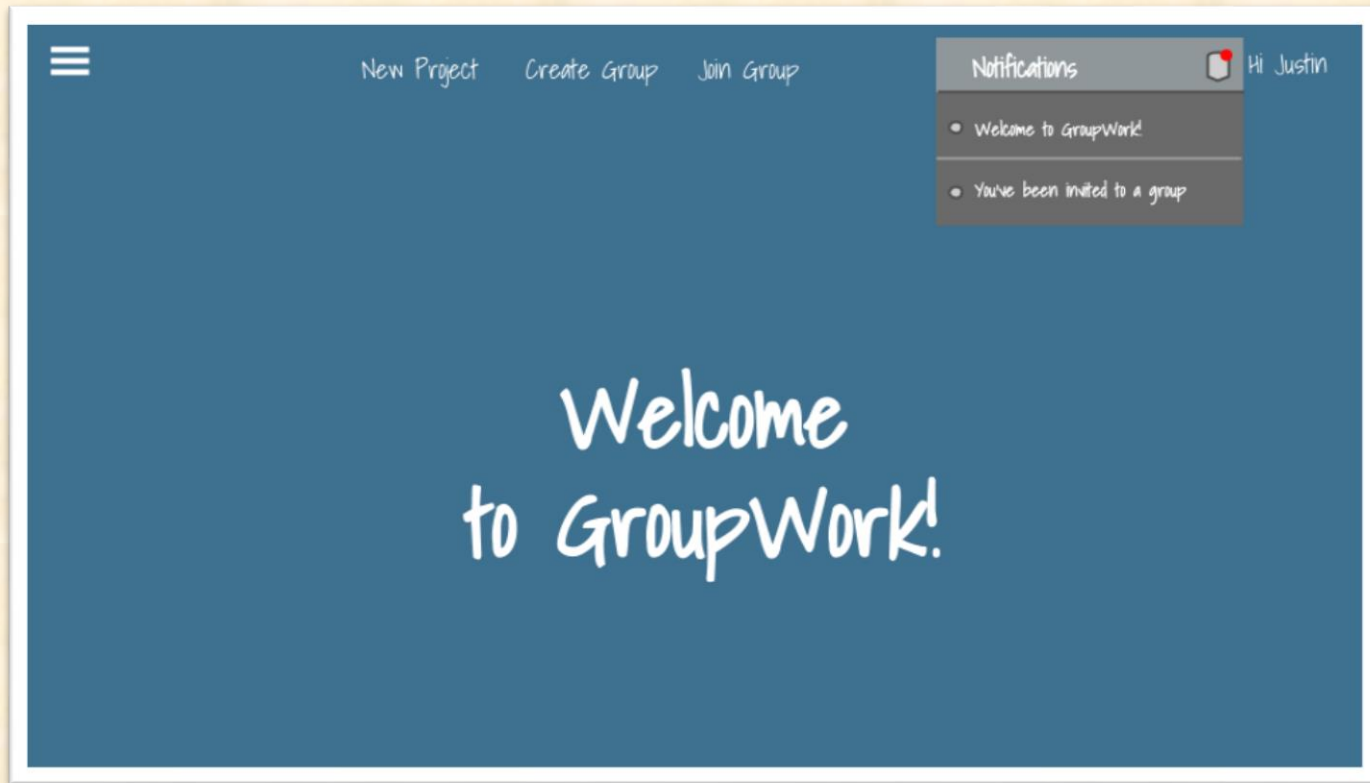
# Screen Mockup: Landing Page



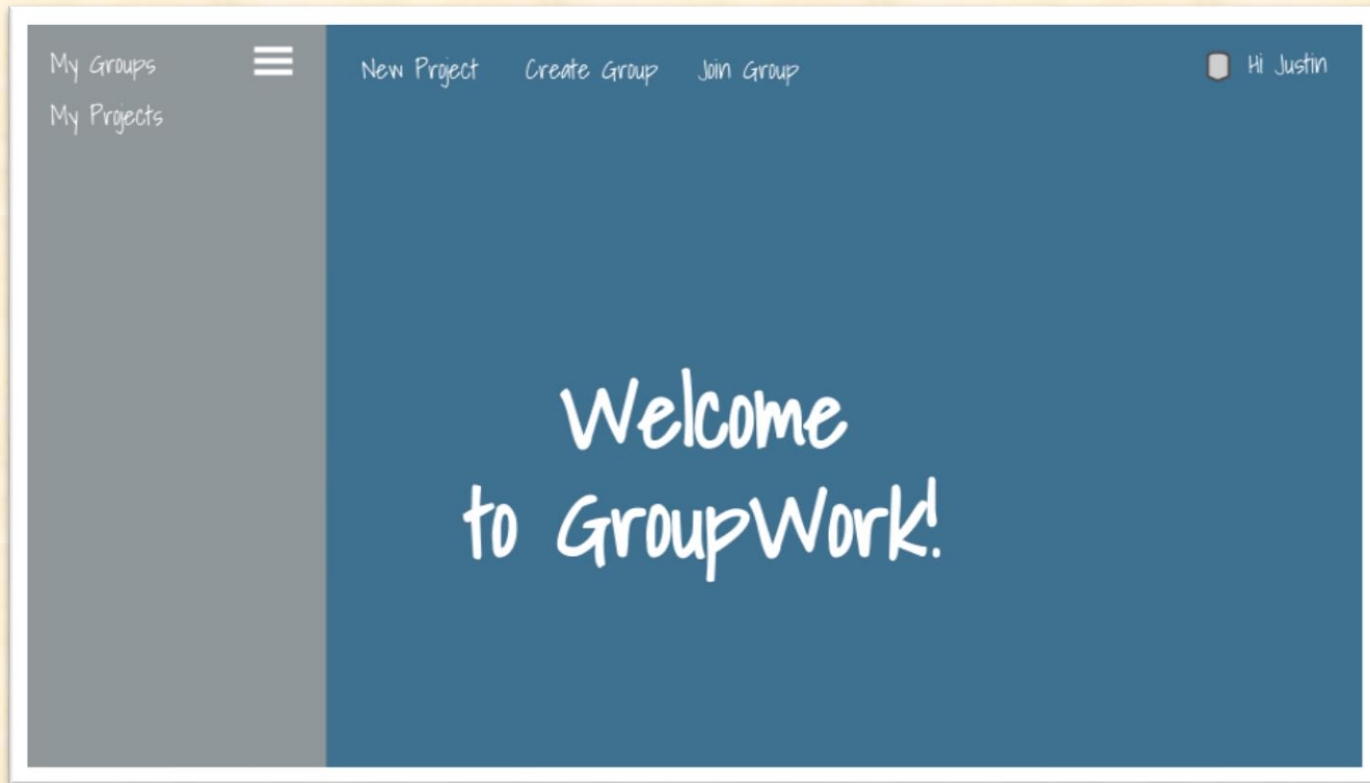
# Screen Mockup: Home Page



# Screen Mockup: Notifications

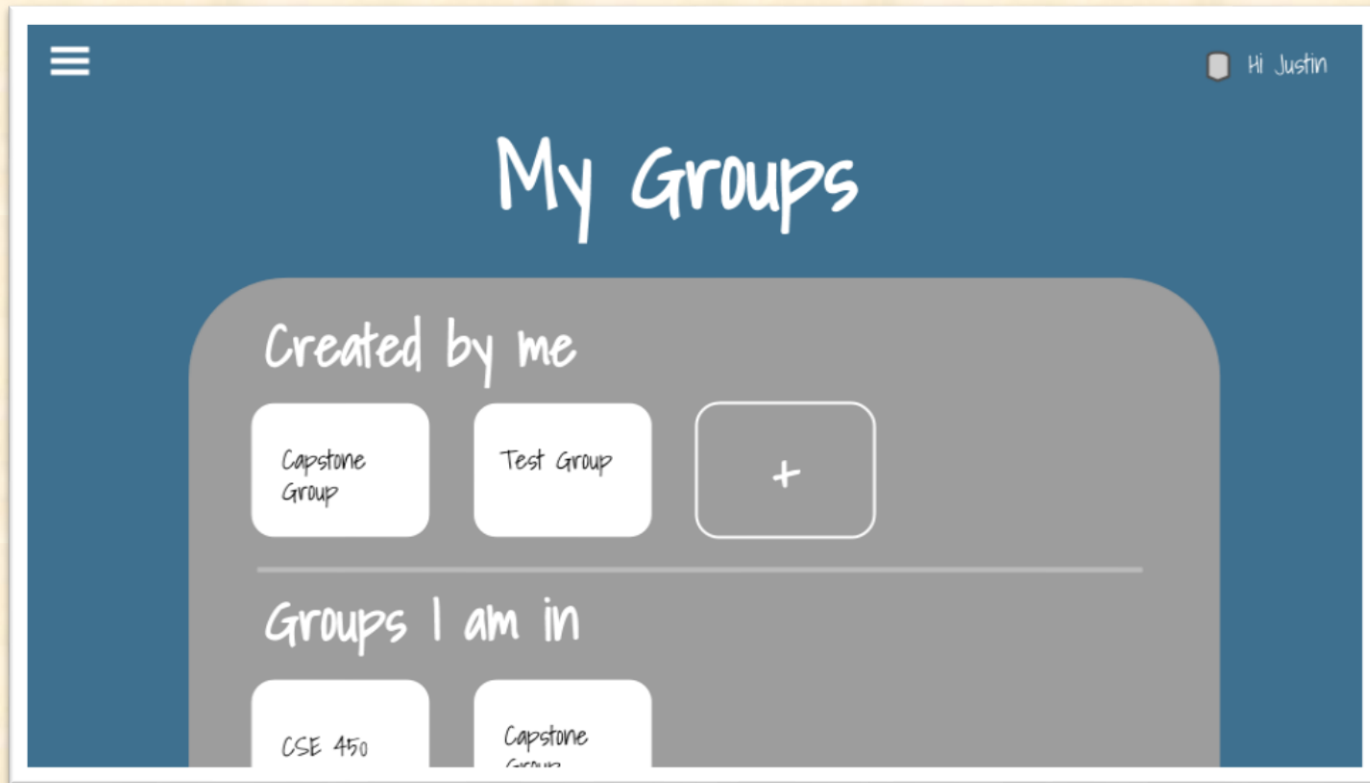


# Screen Mockup: Additional Options

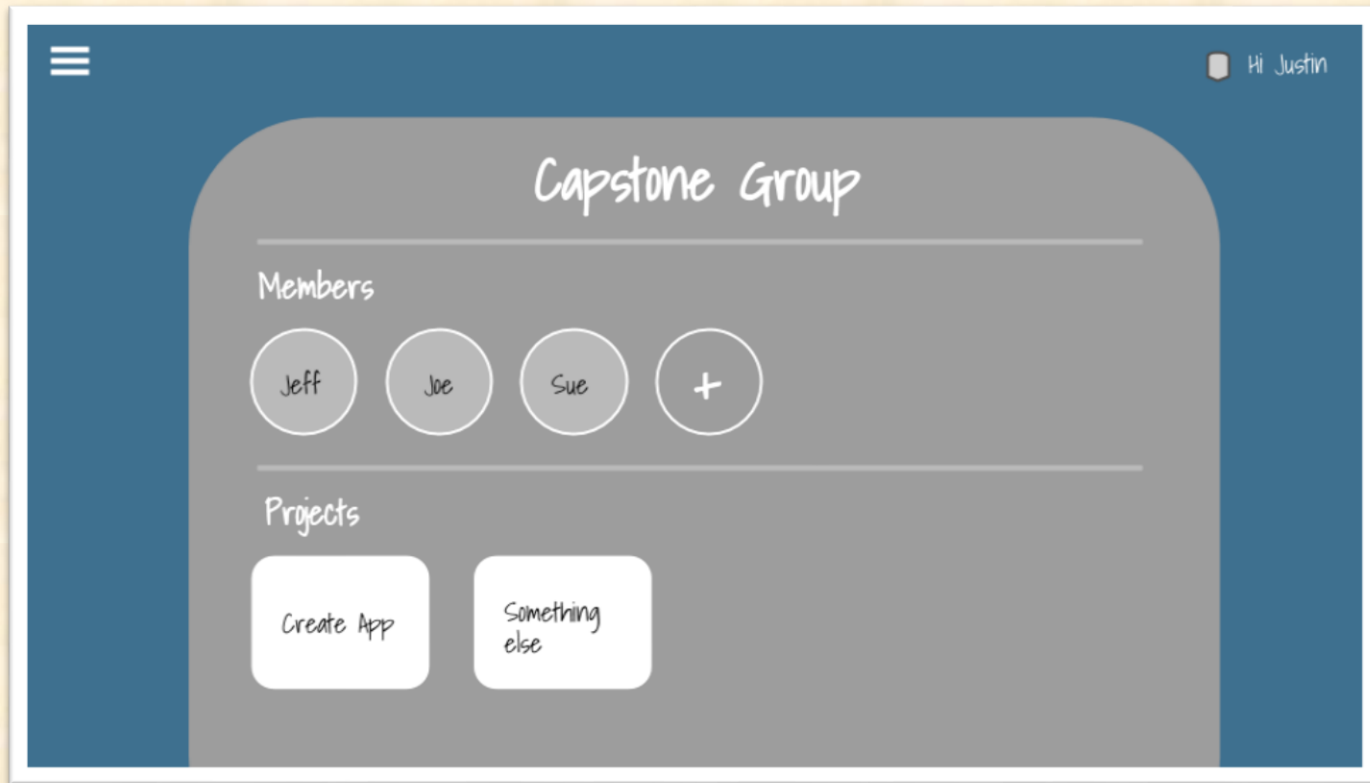




# Screen Mockup: My Groups



# Screen Mockup: Single Group



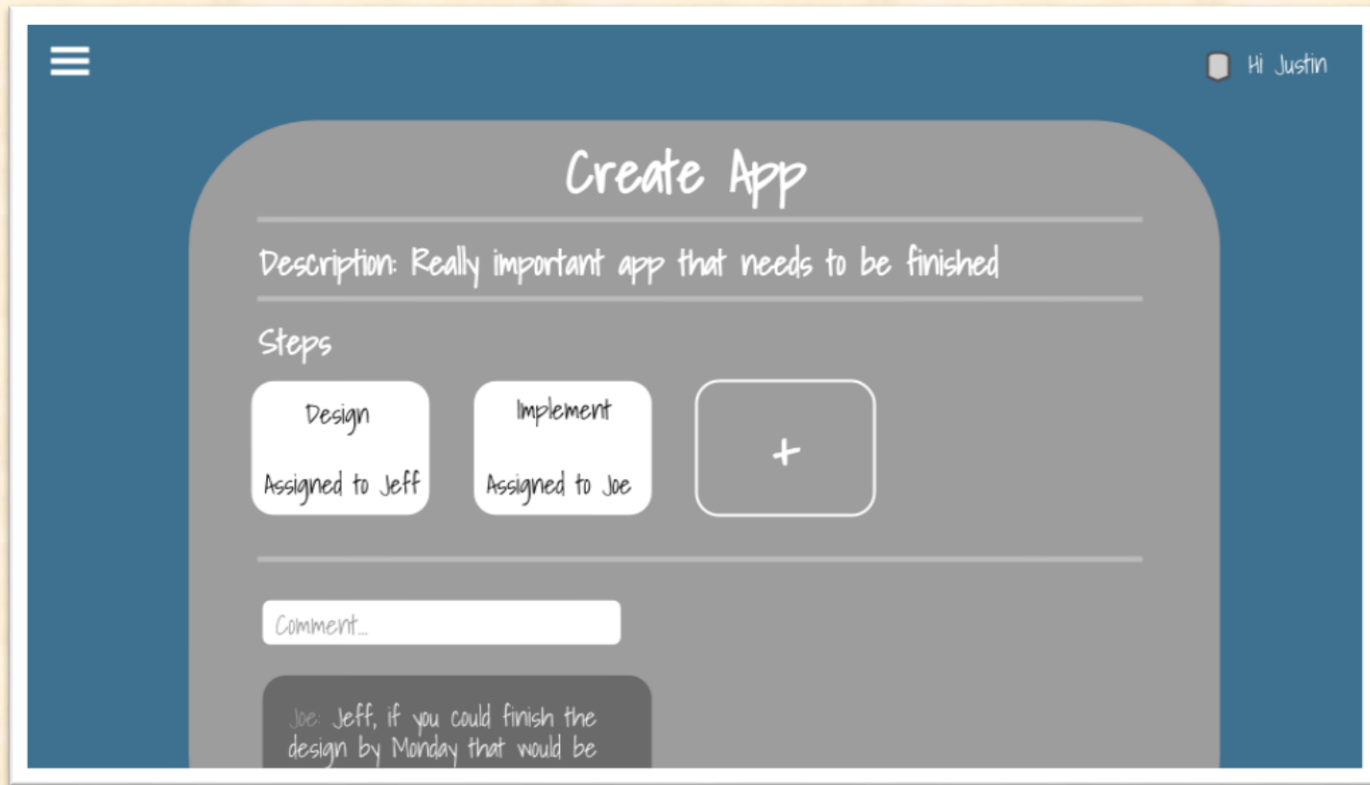
# Screen Mockup: Single Group



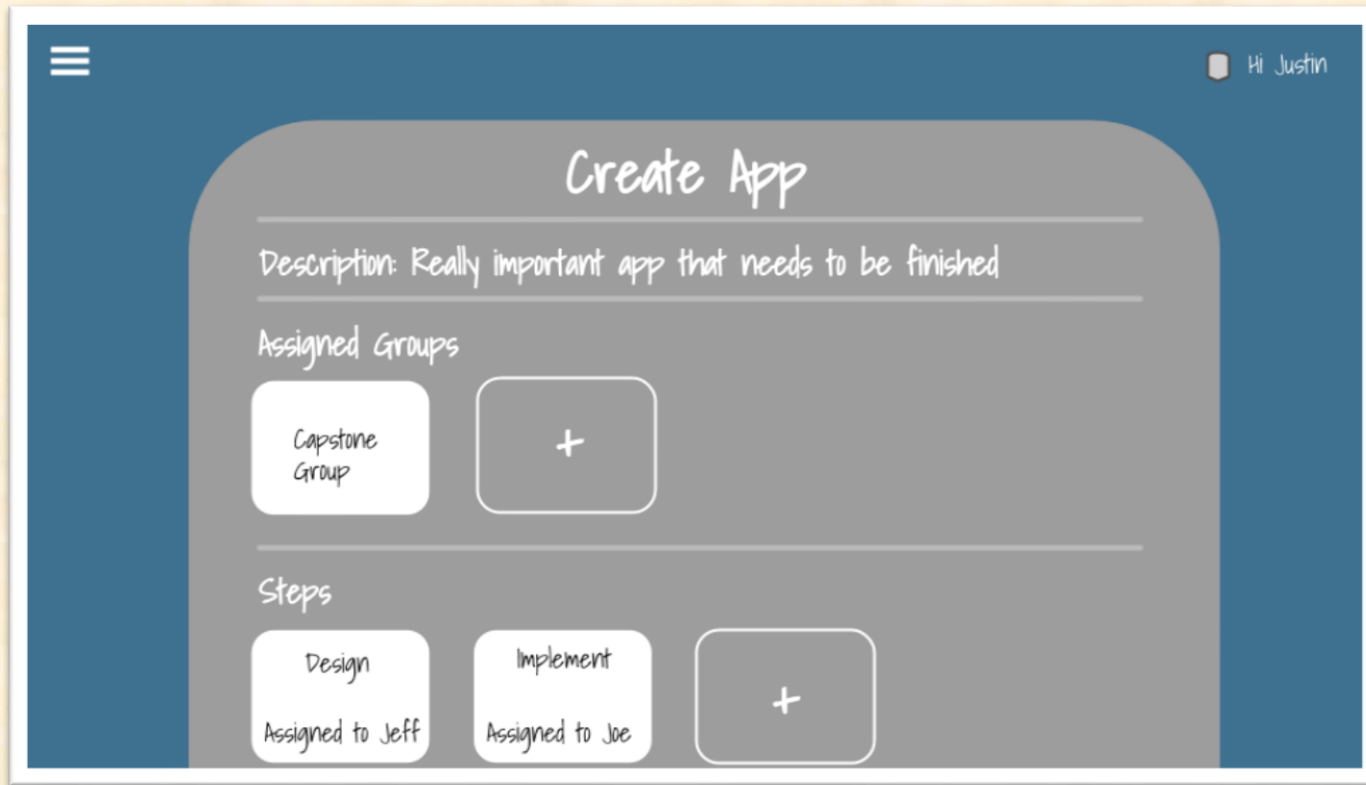
# Screen Mockup: My Projects



# Screen Mockup: Single Project



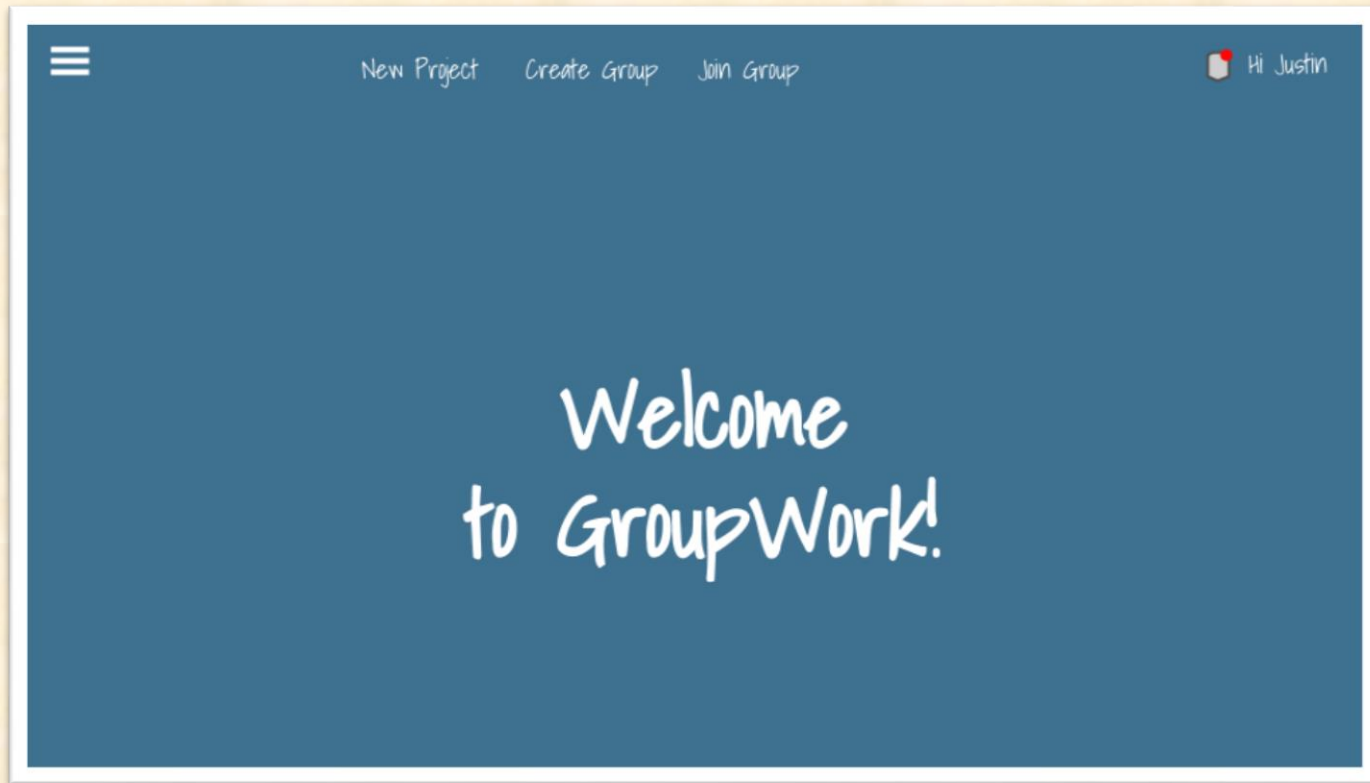
# Screen Mockup: Single Project



# Screen Mockup: Single Step

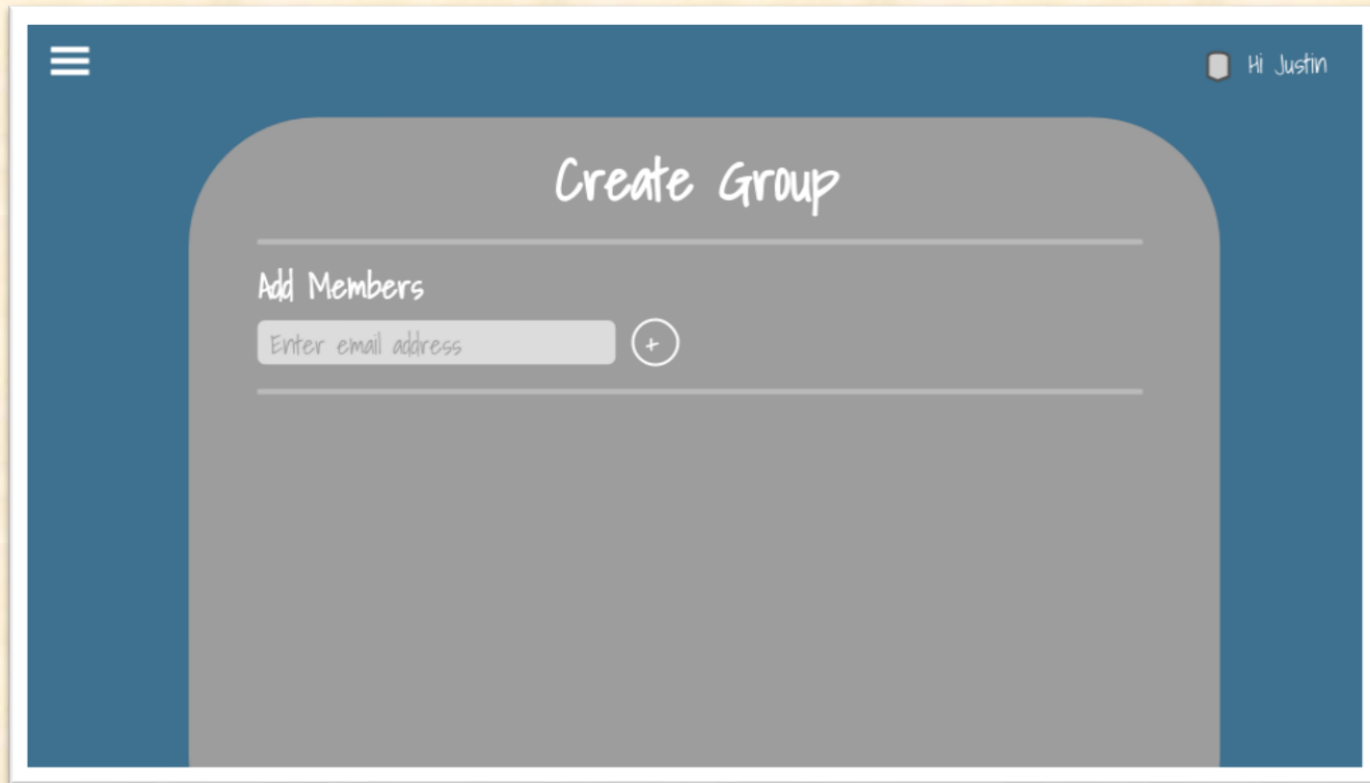


# Screen Mockup: Back Home

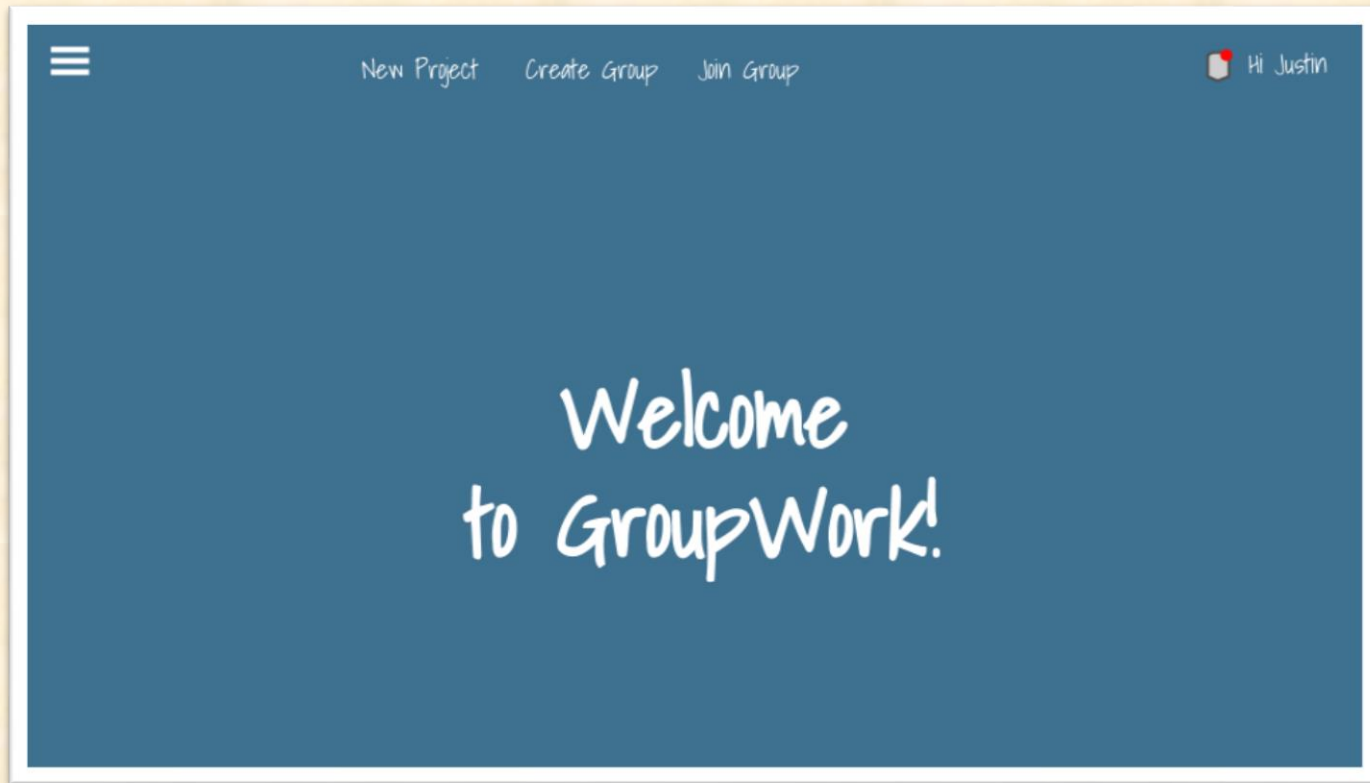




# Screen Mockup: Create Group



# Screen Mockup: Back Home



# Screen Mockup: Create Project

☰ Hi Justin

Enter title for the project

Enter description for the project

Assign Groups

+

Add Steps

+



# Technical Specifications

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## Three Components

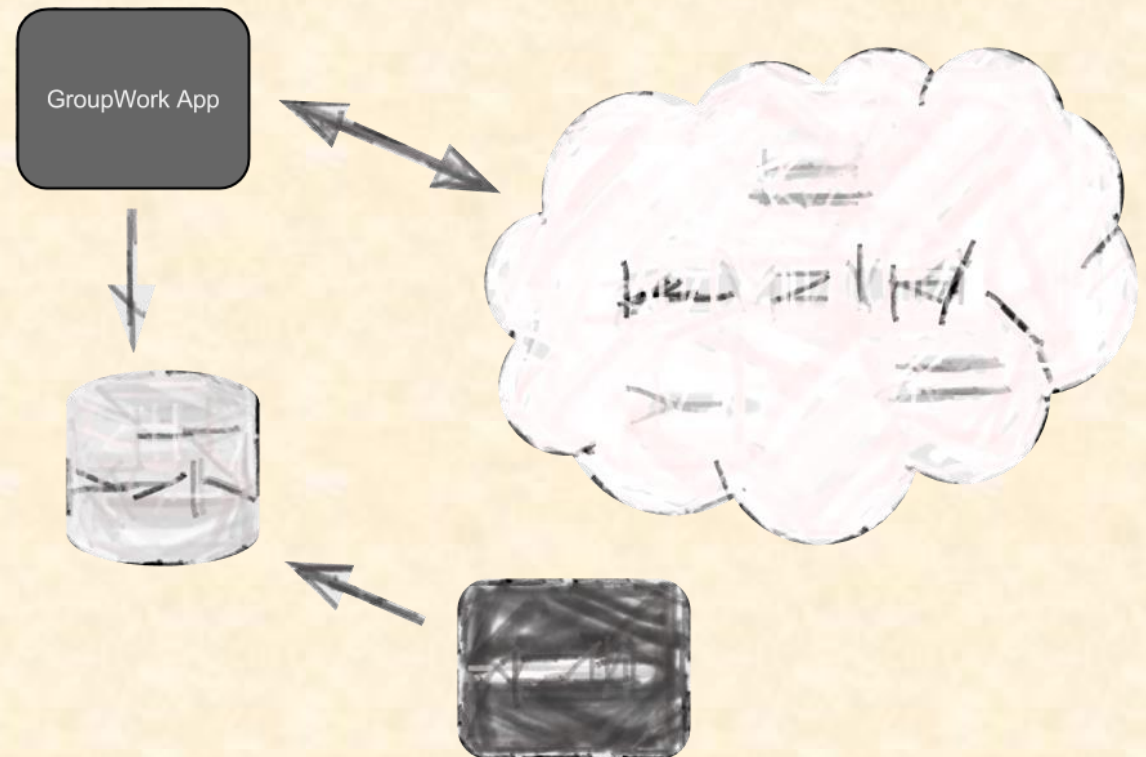
1. GroupWork App
2. Google Drive “Backend”
3. Google APIs used to gather information



# Technical Specifications

## GroupWork App

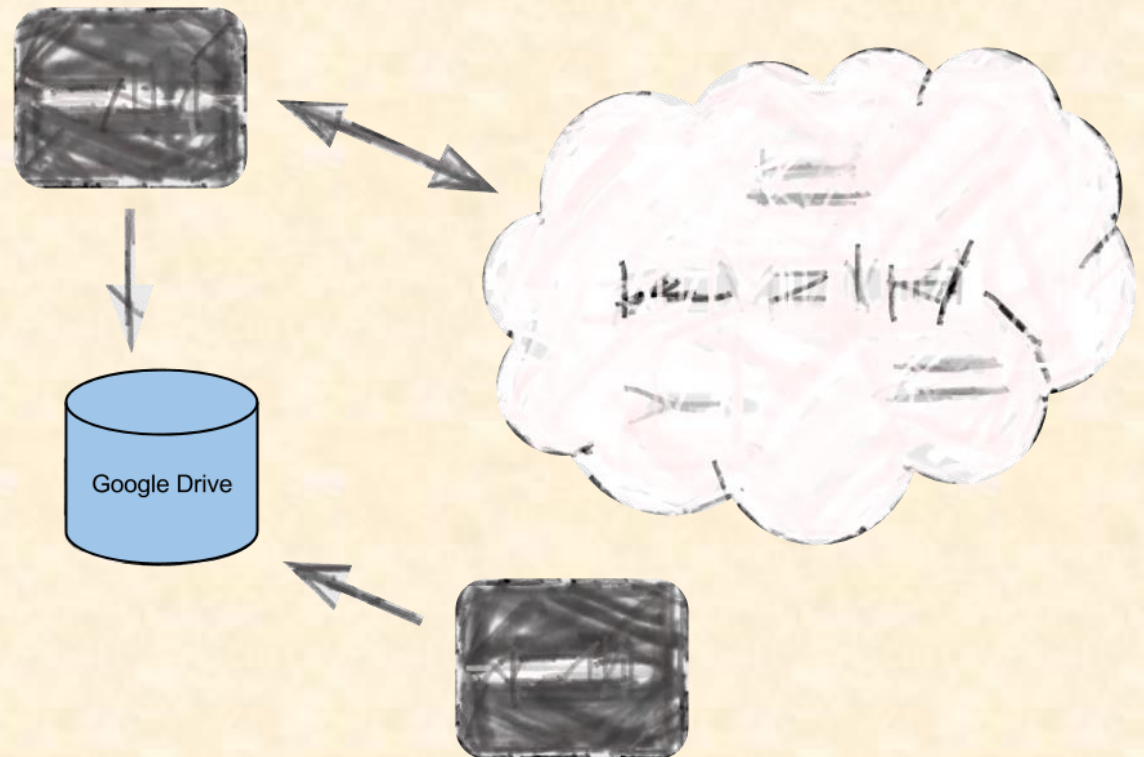
- Chrome App
- .groupWork



# Technical Specifications

## Google Drive “backend”

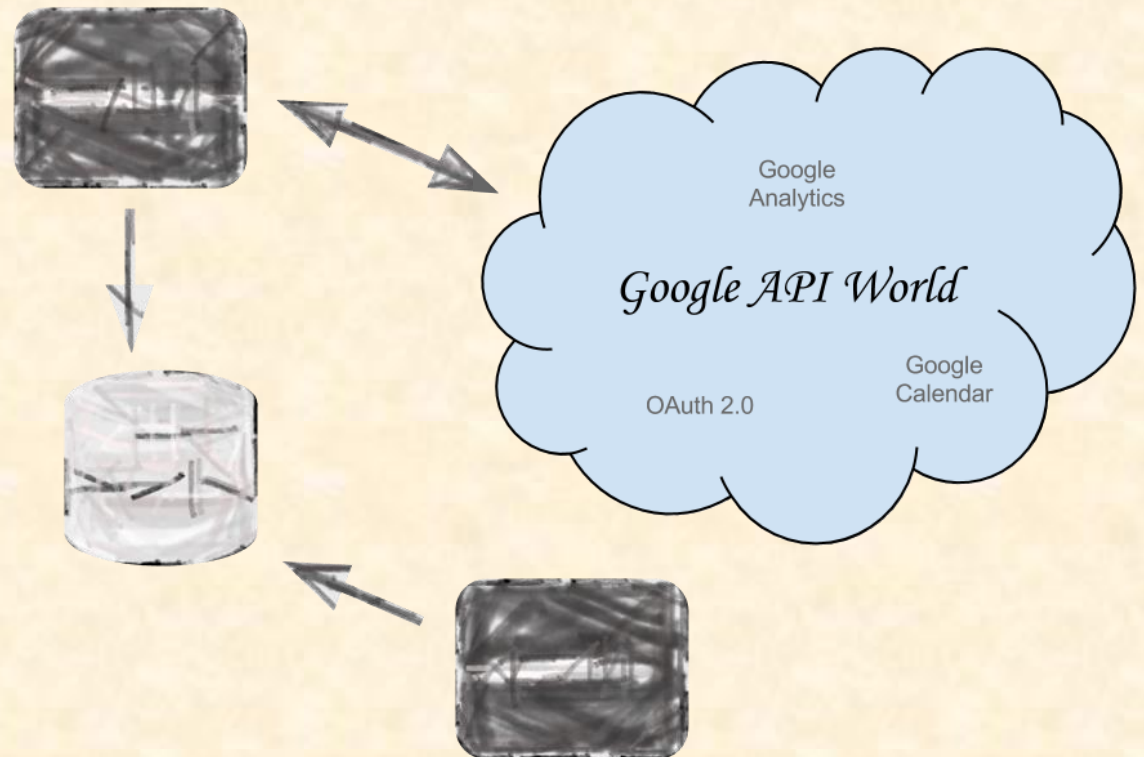
- Project file in project owners Google Drive
- Team members will have appropriate permissions
- Snagit



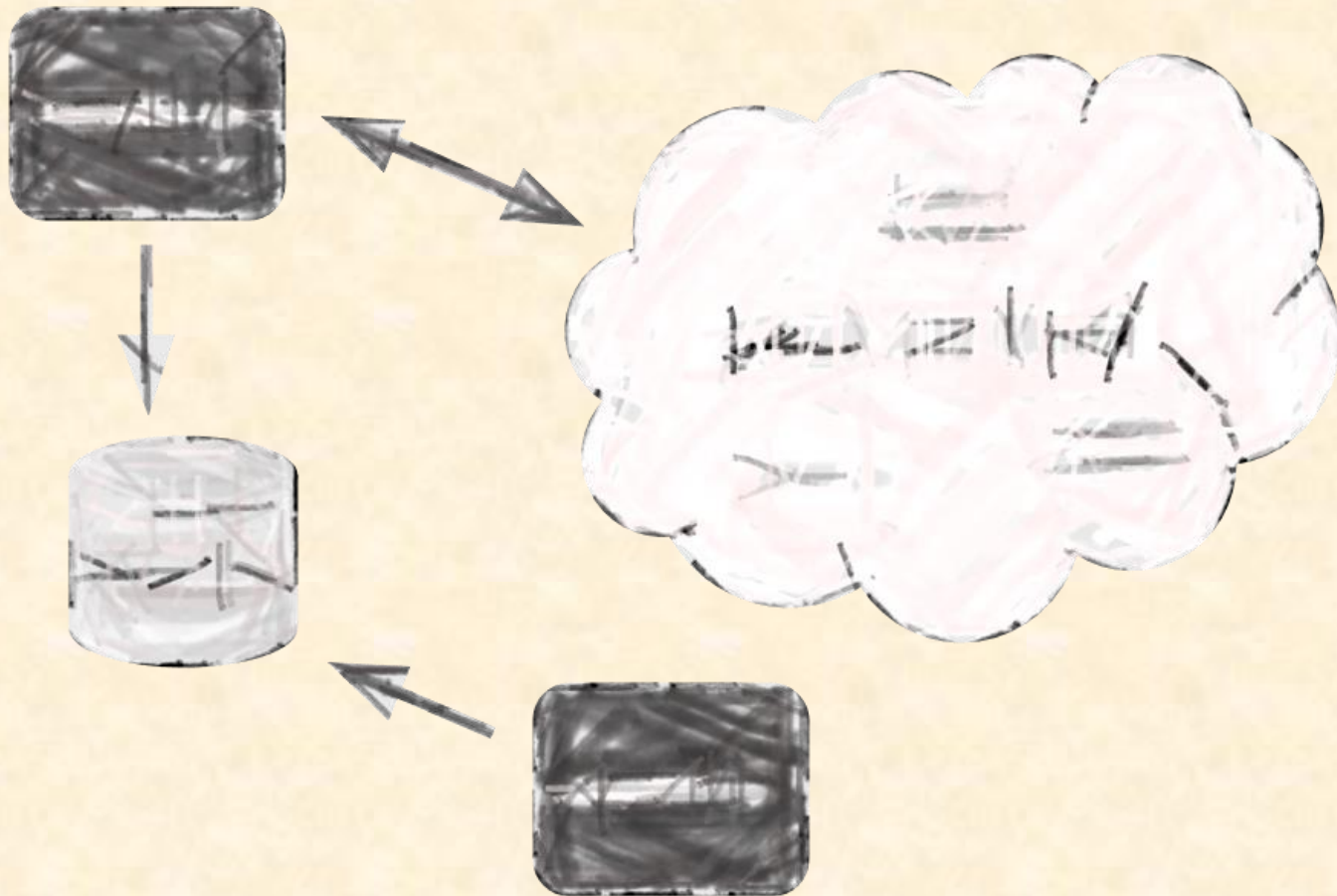
# Technical Specifications

## Other Google APIs

- OAuth 2.0
- Drive
- Analytics
- Calendar
- Others...

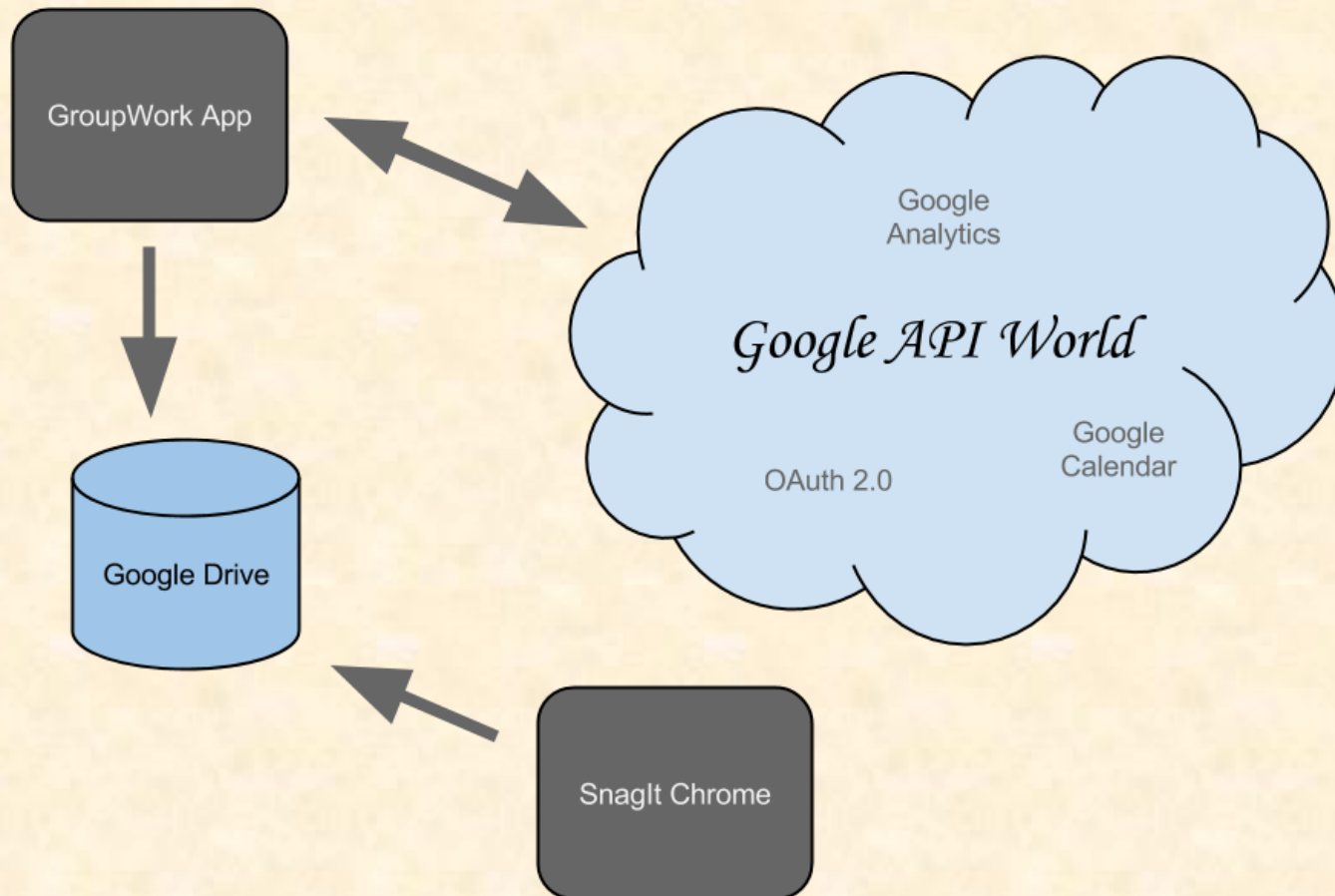


# System Architecture





# System Architecture



# System Components

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- Hardware Platforms
  - PC/Mac (Test and develop environment) Software Platforms / Technologies
- Software Platforms
  - HTML5/CSS3/JavaScript (Basic Chrome App development technologies)
  - Google APIs
    - OAuth2.0, Google Drive, Google Analytics, Google Calendar, etc.
  - Chrome App IDE/Notebook++/Eclipse...



# Testing

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- “Eat your own dogfood”
- Prototype → Feedback



# Risks

- Limited Google Chrome application development
  - Ex: If Google Drive isn't integrated project cannot be completed.
  - Team members are to work on small projects similar to "hello world" in order to facilitate learning
- Limited Web development
  - Each team member to read documentation on languages but also discuss software architecture with client
  - Put a member in charge of web development
- Feature Creep
  - Since there is great freedom in development for the project, there may be a potential for feature creep
  - The team will communicate with the client at regular intervals to constantly check the status of the application and to make sure the team is on track.

