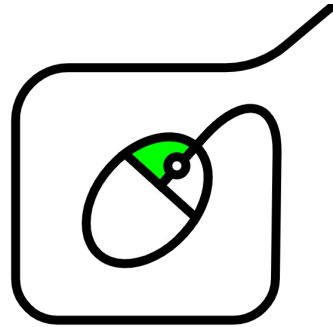


GeekSurvey

UGRADS



SuperGeeks

Tim Giroux, Kyle Austria, Pengfei Liu, Gustavo Valencia

1. Introduction

- Mentor: Felicity Escarzaga
- Clients:

Dr. Marco Gerosa

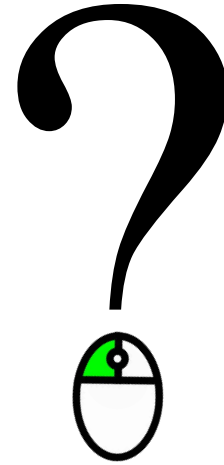


Dr. Igor Steinmacher



2.1 What's the Problem?

- Large and complex business
- Research is essential to success
- Insights are valuable to modern industries
- Gathering data requires participants



2.2 Problem Statement

- Difficulty with recruitment
- Current methods do not work



Figure 1: Client's current business process

2.3 Problem Statement

- Do not satisfy recruitment requirements
- Amazon Mechanical Turk and Prolific.co are limited



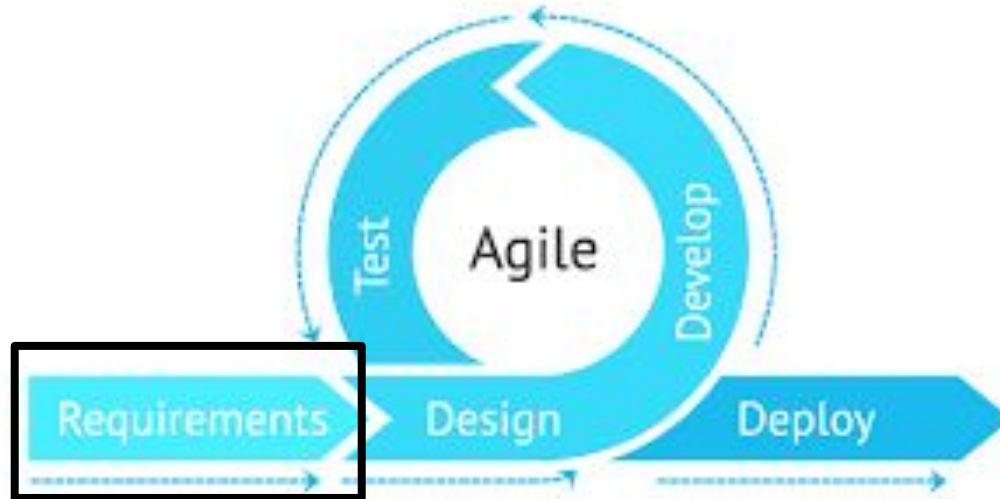
3. Solution Overview



Figure 2: Improved business process

4.1 Requirements Acquisition

- Project Proposal Document
- Regular E-Mail Communication
- Virtual Meetings at least Bi-Weekly




4.2 Requirements

Key Features:


- Researcher View
- Participant View
- Linking to external survey platforms and tracking
- GitHub Profile integration
- Admin Panel
- Researcher/Participant Payments



5.1 Architecture and Implementation Review



Home Profile Research Participate

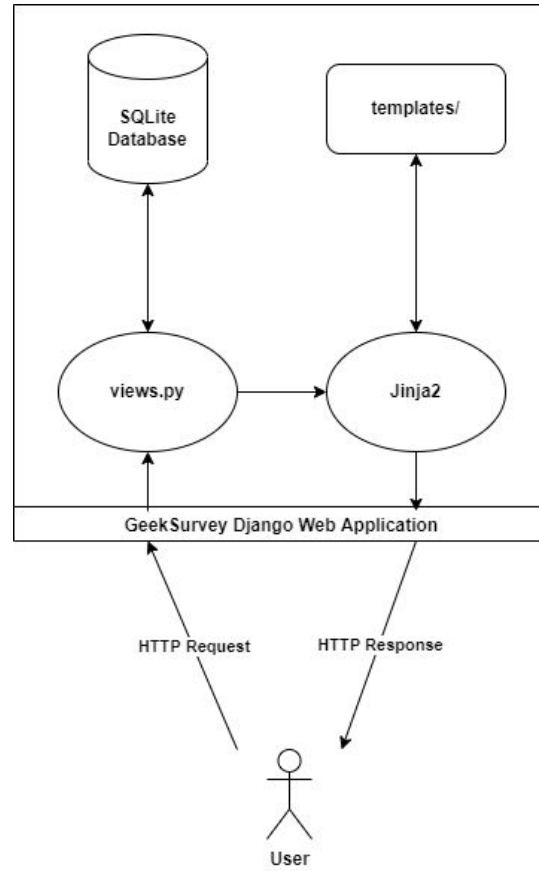


Revolutionizing Software Engineering Research

Conduct and participate in software engineering research studies with GeekSurvey, a platform that solves the researcher-participant coordination problem!

[Get Started](#) [Learn More](#)

5.2 Architecture and Implementation Review



5.3 Architecture and Implementation Review

Study Form:

Compensation (USD)* Maximum Participants Survey URL*

Enrollment Criteria ^

Minimum Age years Maximum Age years

Required Occupation

Minimum Experience years Maximum Experience years

Required Education

Required Race / Ethnicity

Required Gender

Require Experience With Open Source Development?*

Profile Form:

Years of experience*

Level of education*

Occupation*


Country of origin*

Current location*


Race and ethnicity*

Experienced With Open Source Development?*

6.1 Prototype Review



Home Profile Research Participate



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6.2 Prototype Review



[Home](#) [Profile](#) [Research](#) [Participate](#)

Sign In

Please sign in with one of your existing third party accounts. Or, [sign up](#) for a example.com account and sign in below:

GitHub

Google

or

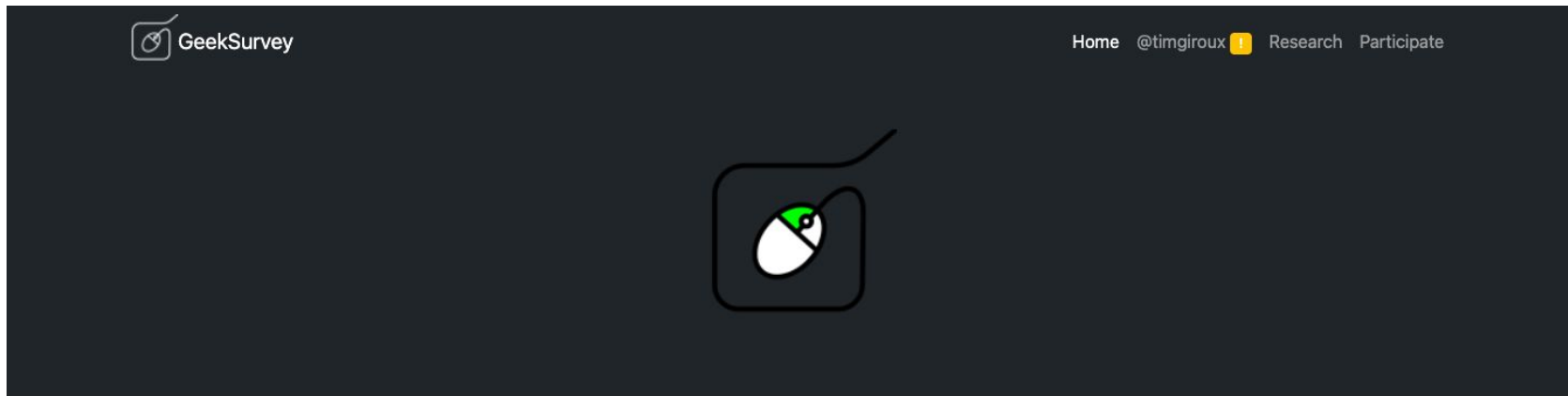
Username:

Password:

Remember Me:

[Forgot Password?](#)

6.3 Prototype Review



Customize your profile

Provide information about you and your skills! The more you customize your profile, the more studies you will be eligible for.

[Edit your profile](#)

Create research studies

Find quality participants by filling out our research study form with desired traits and inserting your external survey platform link.

[Create a study now](#)

Participate in studies

Make a difference by enrolling in studies that interest you! Receive compensation for your valuable time and responses.

[Start participating](#)

6.4 Prototype Review

Profile



timgiroux

timgiroux99@gmail.com

 Don't forget to complete your profile!

[View Full Profile](#)

[Complete Profile](#)

[Log Out](#)

Balance: \$0.00

[Add Funds](#)

[Remove Funds](#)

6.5 Prototype Review



GeekSurvey



Profile

timgiroux



Full Name:

Tim Giroux

Bio:

Student at NAU

Age:

22

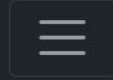
Gender:

Man

6.6 Prototype Review



GeekSurvey




Fund Profile

Pay \$125 to add \$100 to your account

Buy Now



6.7 Prototype Review

🛒 \$125.00 USD

Pay with PayPal

With a PayPal account, you're eligible for free return shipping, Purchase Protection, and more.

Show

Having trouble logging in?

or

[Cancel and return to Test Store](#)

[English](#) | [Français](#) | [Español](#) | [中文](#)

6.8 Prototype Review

Profile



timgiroux

timgiroux99@gmail.com

Student at NAU

[View Profile](#) [Edit Profile](#) [Log Out](#)

Balance: \$100.00

[Add Funds](#) [Remove Funds](#)

6.9 Prototype Review



[Home](#) [@timgiroux](#) [Research](#) [Participate](#)

Research Dashboard

[Create a New Study](#)

Your Studies

Look's like there's nothing here!

6.10 Prototype Review



Home @tingiroux Research Participate

Study Form

Title*

Fruit Study

Expiry date*

04/25/2022



Description*

What is your favorite fruit?

Completion code*

bananaphone

Compensation
(USD)*

\$ 2.50

Maximum
Participants

51

Survey URL*

<https://forms.gle/8W7kfuCrbBAcGz8WA>

6.11 Prototype Review

Research Dashboard

[Create a New Study](#)

Your Studies

Fruit Study

What is your favorite fruit?

Balance: \$0.00

Enrolled: 0/51

Completed: 0/0

[View](#)

[Edit](#)

[Funds](#)

[Participants](#)

[Delete](#)

6.12 Prototype Review



[Home](#) [@timgiroux](#) [Research](#) [Participate](#)

Manage Study Funds

timgiroux \$100.00

Fruit Study \$0.00

Transfer from your account to your study

Amount (USD)*

[Submit](#)

TIP: Negative amounts will move from your study to your account.

6.13 Prototype Review

Your Studies

Fruit Study

What is your favorite fruit?

Balance: \$50.00

Enrolled: 0/51

Completed: 0/0

View

Edit

Funds

Participants

Delete

6.14 Prototype Review

Manage Study Participants

\$50.00 Fruit Study

c (completed) s (compensated)	Username	Actions
c	@timgiroux	Remove Approve \$2.50

TOTAL: 1/51

6.15 Prototype Review


Manage Study Participants

\$47.5 Fruit Study


C (completed) \$ (compensated)	Username	Actions
C \$	@timgiroux	Remove

TOTAL: 1/51

6.16 Prototype Review



Home Profile Research Participate



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6.17 Prototype Review



Home @participant Research Participate

Profile



participant

participant@example.com

I am participating in research.

View Full Profile

Edit Profile

Log Out

Balance: \$0.00

Add Funds

Remove Funds

6.18 Prototype Review



[Home](#) [@participant](#) [Research](#) [Participate](#)

Participation Dashboard

[Discover New Studies](#)

Your Enrolled Studies

Look's like there's nothing here!

Your Completed Studies

Look's like there's nothing here!

6.19 Prototype Review

Study Discovery



Fruit Study

What is your favorite fruit?

by @timgiroux

[View](#)

6.20 Prototype Review



[Home](#) [@participant](#) [Research](#) [Participate](#)

Fruit Study



What is your favorite fruit?

Created By: [@timgiroux](#)

Enroll

6.21 Prototype Review



[Home](#) [@participant](#) [Research](#) [Participate](#)

Fruit Study



What is your favorite fruit?

Created By: [@timgiroux](#)

You've enrolled in this study, but you still need to complete it.

[Complete this study](#)

6.22 Prototype Review



Home @participant Research Participate

Fruit Study

Completion Page



Please complete the [external survey](#) and then enter the completion code here

Completion code*

Submit

6.23 Prototype Review

GeekSurvey Favorite Fruits

 [timgiroux99@gmail.com](#) (not shared) [Switch account](#) 

*** Required**

What is your favorite fruit? *

Apples

Bananas

Oranges

Other: _____

[Submit](#) [Clear form](#)

6.24 Prototype Review

GeekSurvey Favorite Fruits

Please complete the study on GeekSurvey with the following code: bananaphone

This content is neither created nor endorsed by Google. [Report Abuse](#) - [Terms of Service](#) - [Privacy Policy](#)

Google Forms

6.25 Prototype Review



Home @participant Research Participate

Fruit Study

Completion Page

Please complete the [external survey](#) and then enter the completion code here

Completion code*

bananaphone|

Submit

6.26 Prototype Review



[Home](#) [@participant](#) [Research](#) [Participate](#)

Participation Dashboard

[Discover New Studies](#)

Your Enrolled Studies

Looks like there's nothing here!

Your Completed Studies

[Fruit Study](#)

6.27 Prototype Review



Home @participant Research Participate

Profile



participant

participant@example.com

I am participating in research.

View Full Profile

Edit Profile

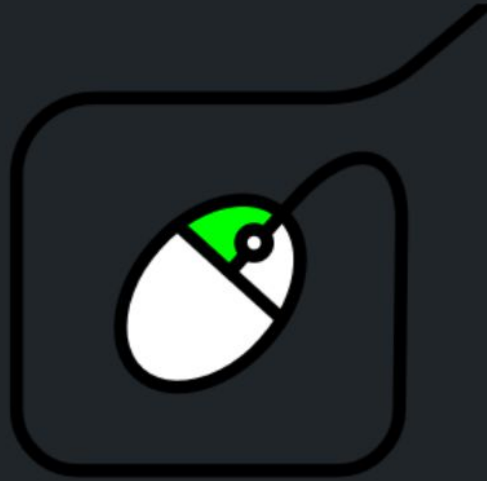
Log Out

Balance: \$2.50

Add Funds

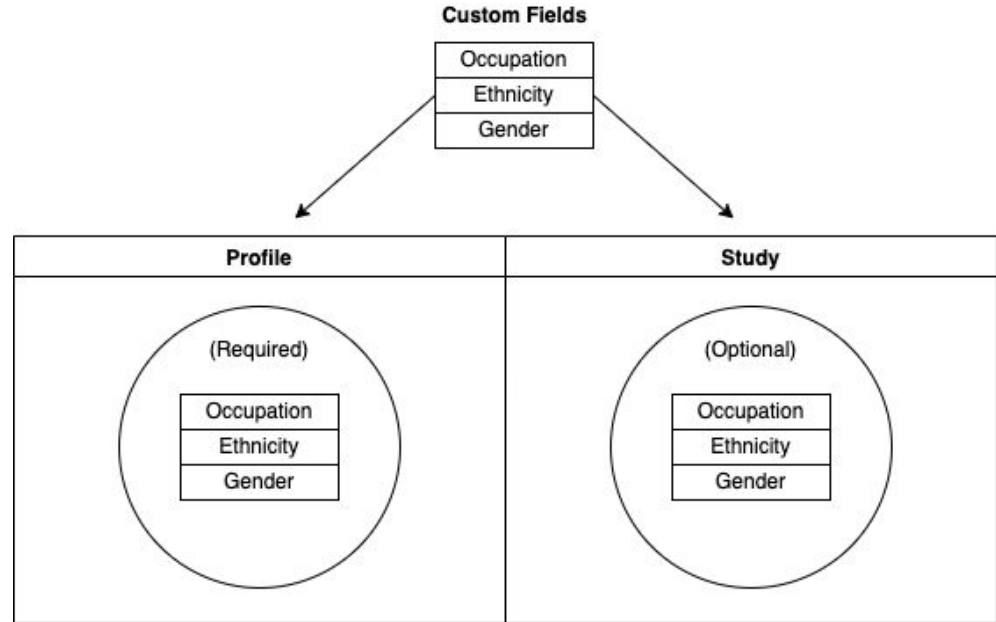
Remove Funds

6.28 Prototype Review



7.1 Challenges and Resolutions

- Enrollment Criteria
 - Needs to match fields in the profile
 - Needs to be customizable






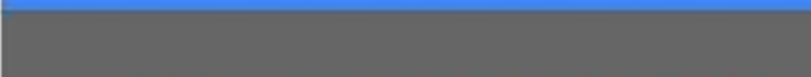


7.2 Challenges and Resolutions

- Payments
 - Legal and business issues with deployment

The screenshot shows the PayPal Developer dashboard. At the top left is the 'PayPal Developer' logo and a search bar. To the right are navigation links for 'Docs', 'APIs & SDKs', 'Tools', and 'Support', along with a 'Log in to Dashboard' button. The left sidebar contains a menu with sections 'DASHBOARD' and 'SANDBOX'. Under 'SANDBOX', 'Accounts' is highlighted. The main content area is titled 'Sandbox accounts' and contains the text: 'Log in to the Dashboard to create personal and business sandbox accounts to test your code end-to-end.' Below this is a callout box with an information icon and the text: 'Non-U.S. developers: read our [FAQ](#).'

8.1 Schedule

Legend	
Done	
TODO	
Due	
Winter Break	
Spring Break	
Now Line (NL)	
Class Deliverables	<i>Red Text and Italicized and Bolded</i>

8.3 Schedule - Stretch Goals

9. Stretch Goals

9.1 Change profile age to a birthdate as a proper date field.

9.2 Customizable expiration date to studies (MOVED TO SPRINT 8: CRUNCH)

9.3 Bootstrap for better UX

9.3.1 Custom elements and color schemes

9.4 More enrollment criteria per client request

9.4.1 Criteria for countries (origin and current location)

9.5 Improve initial log-in flow for github auth + email verification

9.6 Disable social account auth if API info not defined in .env

9.7 Reorganize code into apps? Researcher code in researchers/ etc.

9.7.1 Study app

9.7.2 Payments app

9.7.3 Research app

9.7.4 Participate app

9.7.5 Profile app

9.8 Check if user is authenticated through GitHub

9.9 Display GitHub avatar if user is authenticated through GitHub

9.10 Add GitHub enrollment criteria

9.10.1 Add GitHub account age

9.11 Move study_email_helper to a custom signal that fires upon study creation

9.12 I can't see other email recipients in the group email for study notifications

NOTE: Currently all email recipients are in the "to" field. Consider sending individual emails instead of a batch email

9.13 Email notifications are parallelized

NOTE: Currently this blocks an http response upon study creation

9.14 Claims are parallelized

NOTE: Currently this blocks on two different API calls to PayPal

9.15 Fix the warning about naive datetime upon study creation

9. Testing Plan and Results

Unit Tests

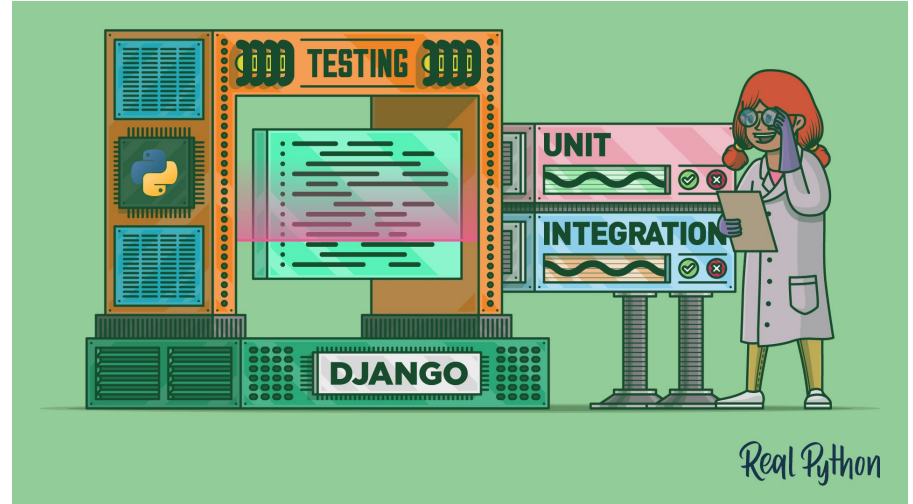
- The unittest standard Python library and the `django.test.TestCase` subclasses
- `can_enroll()`

Integration Tests

- Manually verify Google Forms and PayPal integration

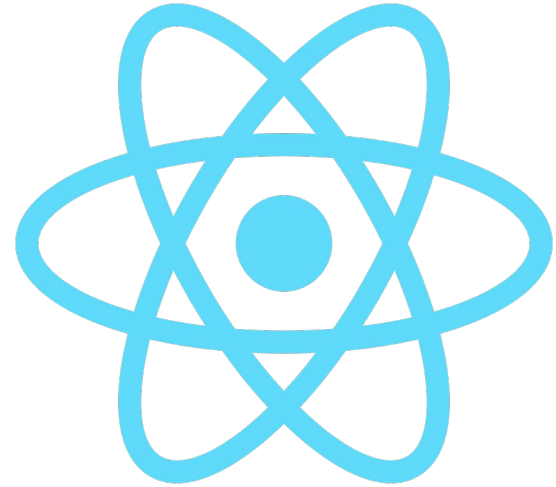
Usability Tests

- Provide feedback on UI and workflows
- Overall positive feedback and suggestions made so far



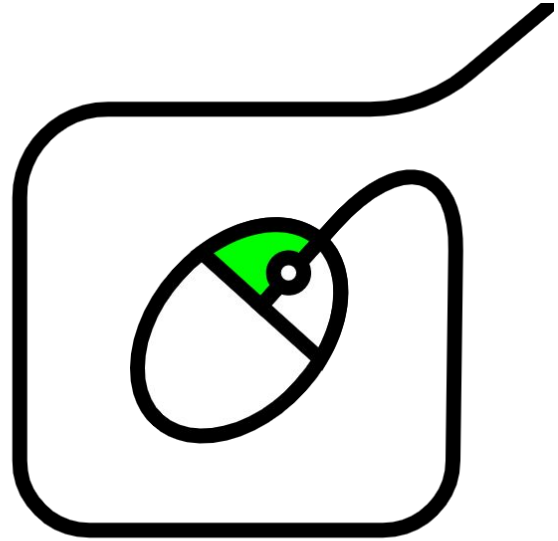
10. Future Work

- Real payments
- Decoupling backend and frontend using ReactJS and a REST API
- Support more research types

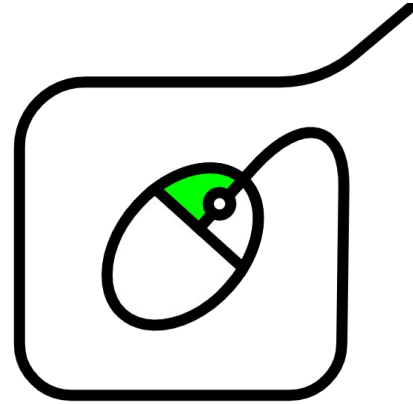


11. Conclusion

- **Solving** Research Coordination
- Competitors **prove** demand
- GeekSurvey is **open source**



Thank You!



For more information, follow the QR code to our team website