



Final Project for SW Engineering Class

CSC 648-848 Section 01 Fall 2016

Demo URL: <http://sfsuswe.com/~f16g01/DavidsList/>

Team 1

Nora Schinkel, Team Lead | ncschinkel@gmail.com

David Chau, Technical Lead

Paul Derugin

Imran Irfan

Yansen Liu

Steven Nguyen

Submitted to—

Dr. Dragutin Petkovic

Department of Computer Science, San Francisco State University

Date of Submission: 2016 December 19



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Product Summary

In this report we present **DauidsList**, an apartment rental web service for students. With property taxes increasing every year, many Bay Area homeowners would like to rent out their homes and apartments (or simply a bedroom) to students. However, it is difficult for homeowners to make sure the students they meet on rental websites are actual students. This is where DauidsList comes in. We provide a service where students can be verified by their university email address, thus creating a safe and trustworthy marketplace for landlords and students.

DauidsList provides the following features:

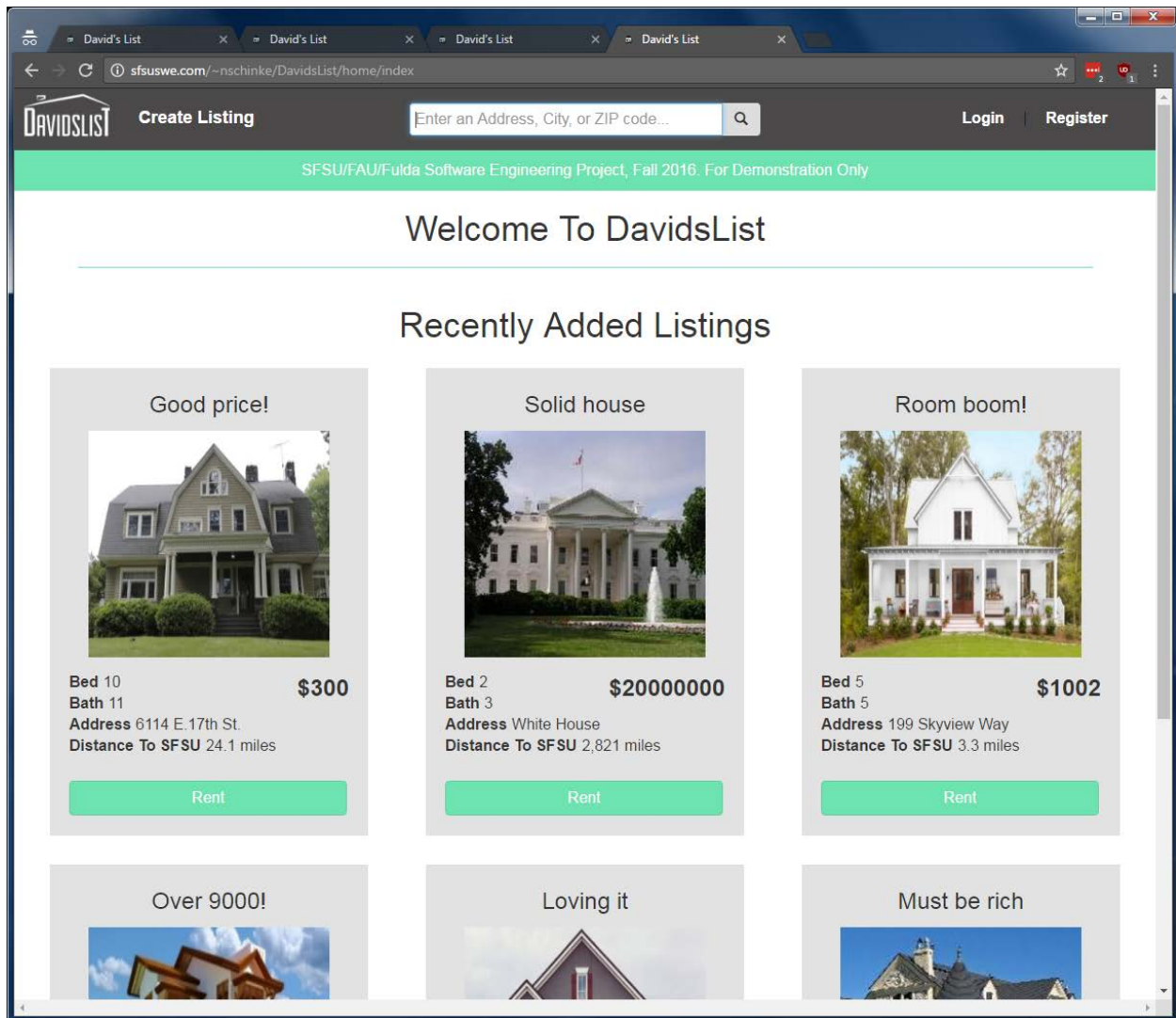
- Guest users can browse the website, but cannot post listings or message landlords.
- Everybody can create an account on DauidsList and everybody can read the Terms and Conditions and the Privacy Policy.
- Everybody is able to use search for listings. Search results may be filtered based on number of bedrooms, price, and distance to campus.
- Registered users can log in with their account info. Once logged in, they can create, edit, and delete listings. In creating a listing at least one picture of the listing must be uploaded, accompanied by a title, price, and address. Landlords are given the option to show only an approximate address on the website; this means that only the ZIP code of the listing will be shown to other users.
- Registered users seeking an apartment can communicate with the landlord of a listing by clicking on the “Contact” button on the Listing Detail page of a listing. Registered users can view and reply to messages through the All Messages page under My Account.
- Administrators can remove users and listings via Workbench.

DauidsList is now live and can be found via the following URL:

<http://sfsuswe.com/~f16g01/DauidsList/>

Milestone Documents

Product Screenshots



Screenshot 1. Homepage

David's List

sfsuswe.com/~nschinke/DavidsList/home/register

DAVIDSLIST Create Listing Enter an Address, City, or ZIP code... Login Register

SFSU/FAU/Fulda Software Engineering Project, Fall 2016. For Demonstration Only

Register

First Name

Last Name

Email

Username

Password

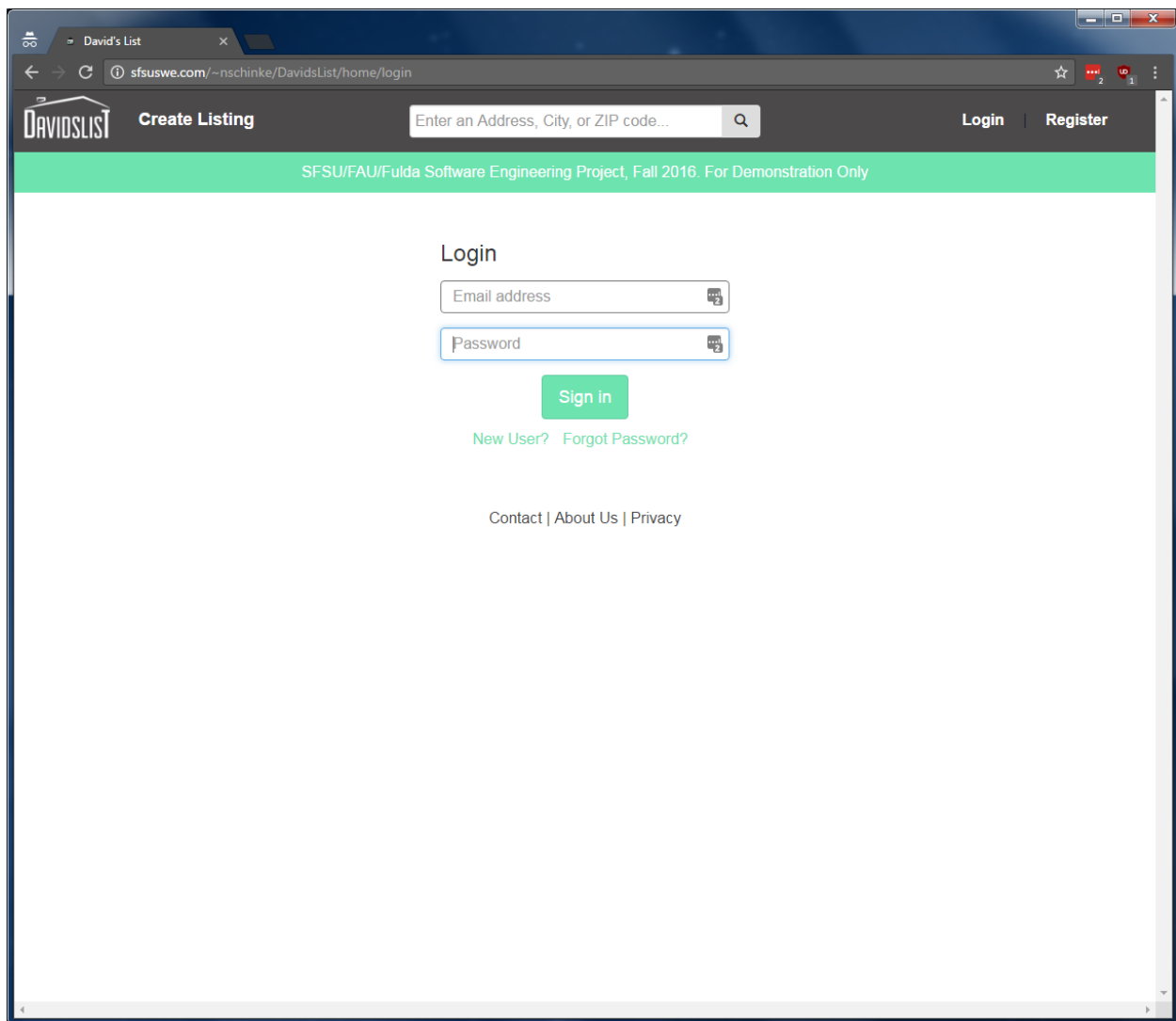
Confirm Password

I have read and accept the TOS [here](#). ☐

Register

Contact | About Us | Privacy

Screenshot 2. Registration page



Screenshot 3. Login page

David's List x David's List x

sfsuswe.com/~nschinke/DavidList/home/rentout

DAVIDSLIST Create Listing Enter an Address, City, or ZIP code... Signed in as JoeSchmuck Logout

My Account

SFSU/FAU/Fulda Software Engineering Project, Fall 2016. For Demonstration Only

Create Listing

Title *

Price * \$

Address *

City * State *

Zipcode *

Approximate Address * ☐ Please check this box when you don't want the exact location of the home displayed.

Bedrooms * Bathrooms *

Type * ☒ Apartment ☐ House ☐ Room ☐ Shared room

Benefits ☐ Internet ☐ Pets ☐ Elevator ☐ Furnished ☐ Air Conditioning

Description

Screenshot 4. Create Listing page

David's List

[Create Listing](#)

Signed in as JoeSchmuck | [Logout](#)

[My Account](#)

SFSU/FAU/Fulda Software Engineering Project, Fall 2016. For Demonstration Only

Refine search

Price

☐ Under \$500
 ☐ \$500 to \$750
 ☐ \$750 to \$1000
 ☐ \$1000 or more

Rooms


☐ 1
 ☐ 2
 ☐ 3 or more

Distance from SFSU

☐ Under 1 mile
 ☐ 1-3 miles
 ☐ 3 miles or more

Results

Showing results 1-5 of 27




Some kind of good house

\$2000

1907 Geneva Ave, San Francisco CA, 94134

Bed: 5 | Bath: 5 | Furnished: Yes | Distance To SFSU: 3.9 miles

More Info




You won't regret getting this

\$2600

Polk Street, San Francisco CA, 94120

Bed: 3 | Bath: 4 | Furnished: Yes | Distance To SFSU: 9.5 miles

More Info



I love it and you shall too

\$3000

Mission Street, San Francisco CA, 94102

Bed: 1 | Bath: 0 | Furnished: No | Distance To SFSU: 4.6 miles

More Info

Screenshot 5. Results page for search query "San Francisco"

David's List

David's List

sfsuswe.com/~nschinke/DavidsList/listings/getlisting/6

DAVIDSLIST

Create Listing

Q


Signed in as JoeSchmuck

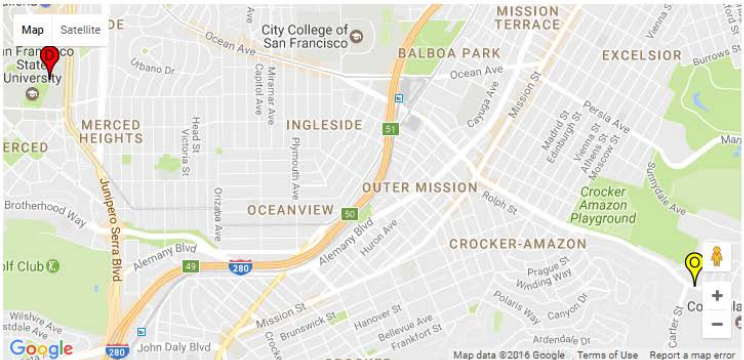
Logout

My Account

SFSU/FAU/Fulda Software Engineering Project, Fall 2016. For Demonstration Only

Listing Detail





Some kind of good house

\$2000

Contact

Favorite

Landlord

Name: verified ttse

Email: ttse@mail.sfsu.edu

1907 Geneva Ave

Bed: 5

Bath: 5

Distance: 3.9 mi

Type room

Internet No

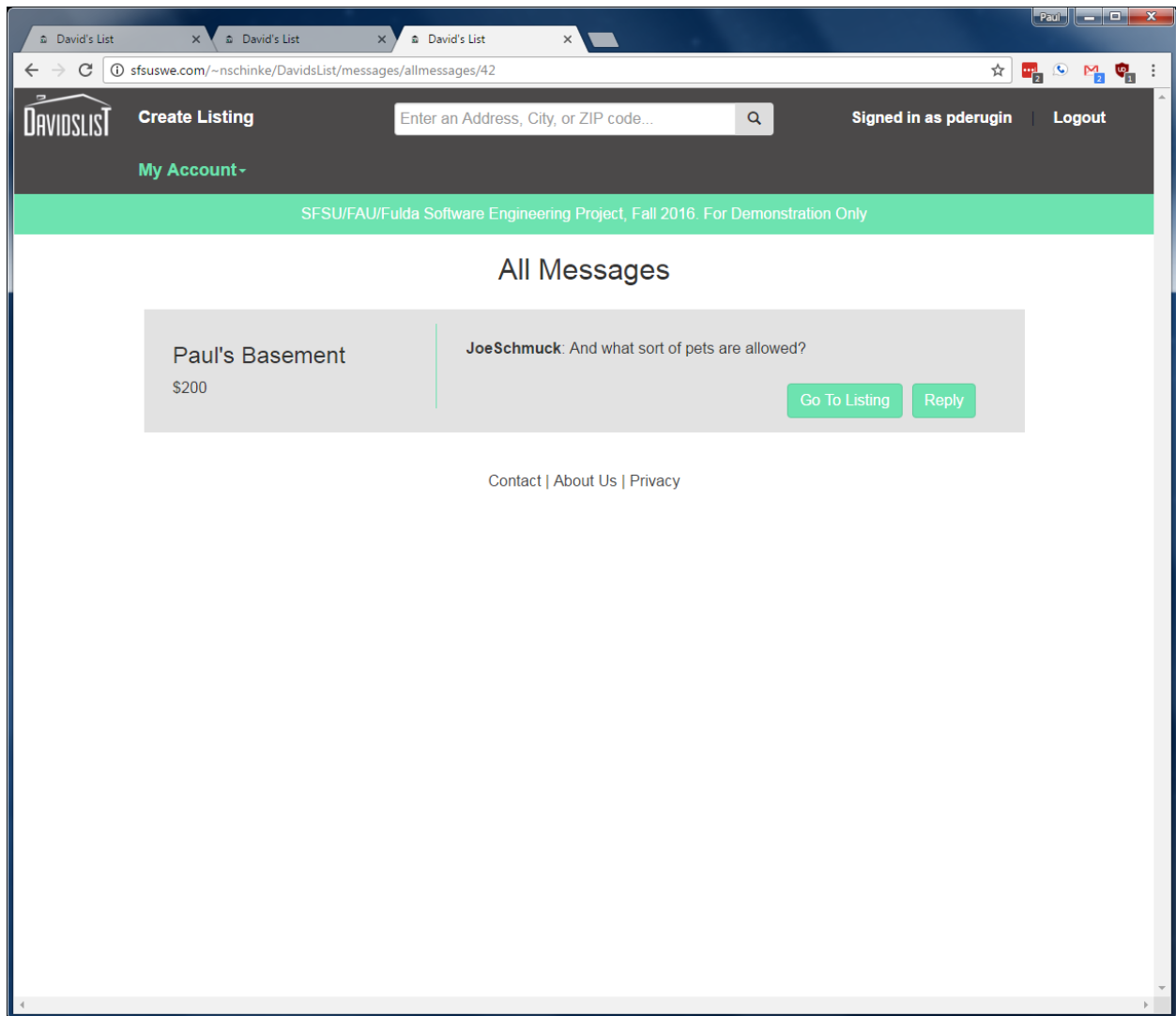
Pets yes

Elevator yes

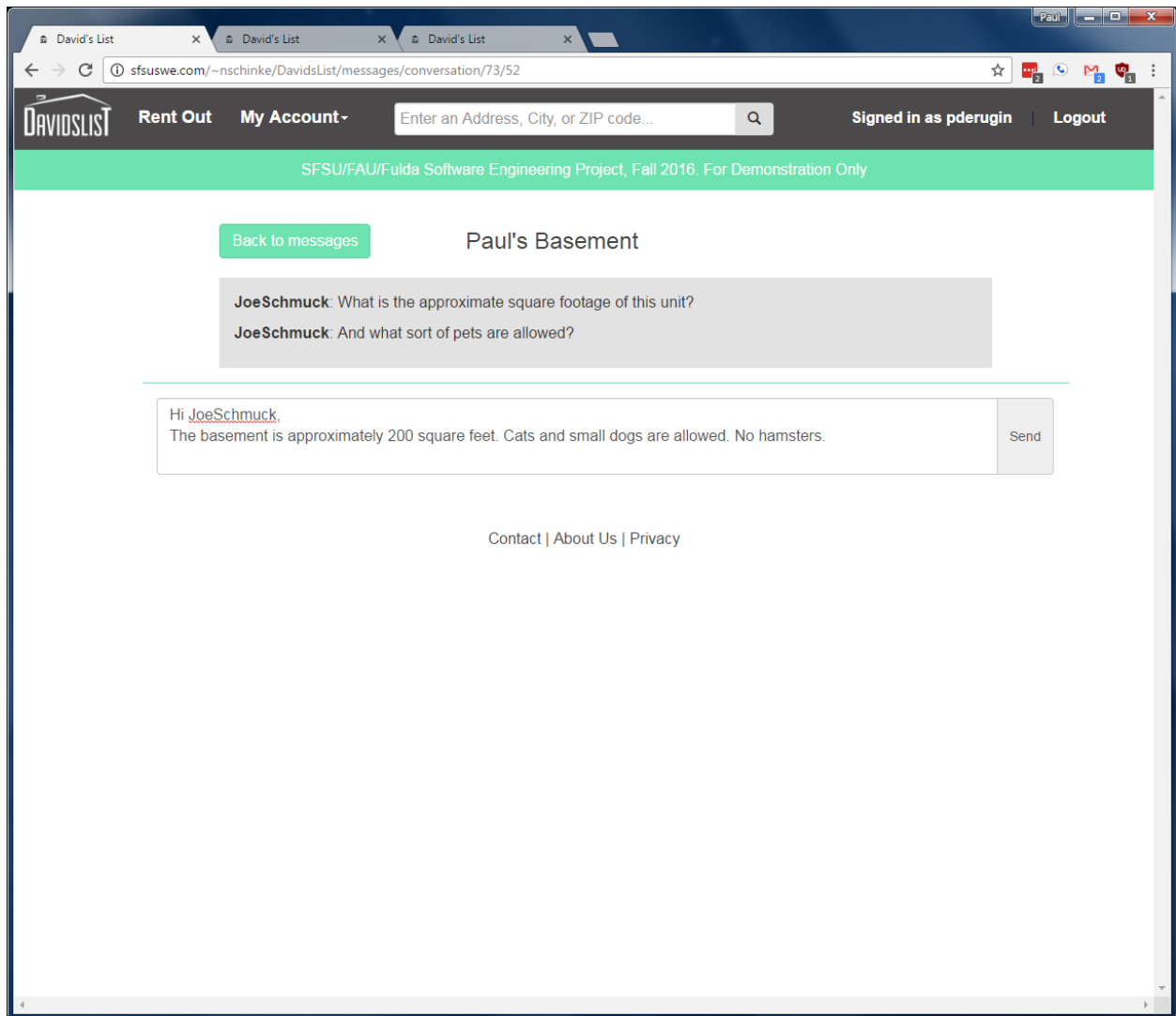
Furnished Yes

A/C No

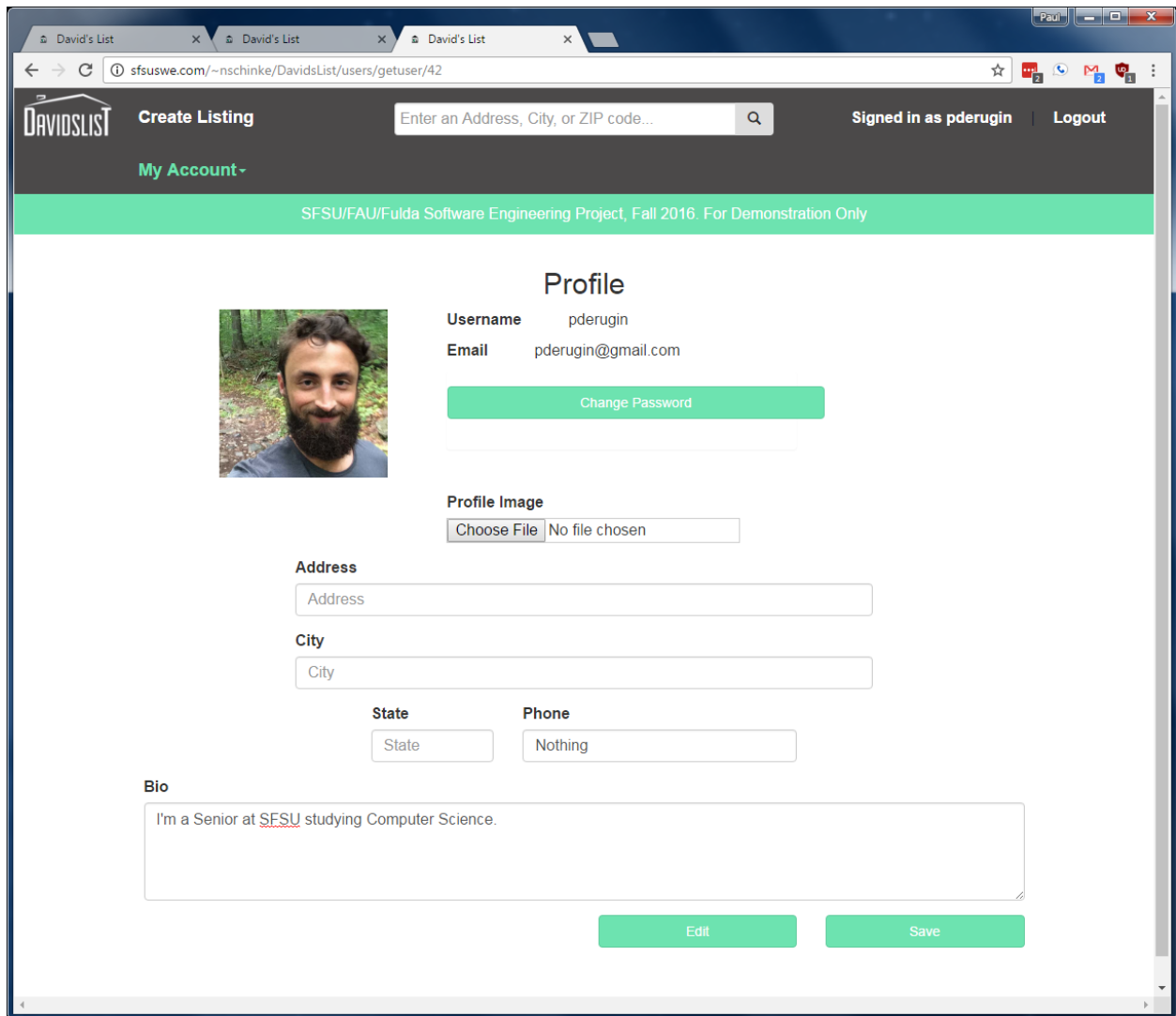
Screenshot 6. Listing Detail page



Screenshot 7. All Messages page (contains most recent sent/received message)



Screenshot 8. Replying to a message



Screenshot 9. My Account – Profile page

David's List

David's List

David's List

← → ↻

sfsuswe.com/~nschinke/DavidsList/users/userlistings/42

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DAVIDSLIST

Create Listing

Enter an Address, City, or ZIP code...

Q

Signed in as pderugin


Logout

My Account

SFSU/FAU/Fulda Software Engineering Project, Fall 2016. For Demonstration Only

Your Listings

Create New Listing



Paul's Basement

\$200


123 Polk St San Francisco CA, 94102

Bed: 1 | Bath: 1 | Furnished: No | Distance from campus: 9.0 mi

Messages

Remove

Edit



Paul's Attic

\$500

62 Nantucket Ave San Francisco CA, 94112

Bed: 1 | Bath: 1 | Furnished: No | Distance from campus: 2.2 mi

Messages

Remove

Edit

Contact | About Us | Privacy

Screenshot 10. My Account – Listings page

David's List

David's List

sfsuswe.com/~nschinke/DavidList/users/favorites/52

☆ 2 3

DAVIDSLIST

Create Listing

Enter an Address, City, or ZIP code...

Q


Signed in as JoeSchmuck

Logout

My Account

SFSU/FAU/Fulda Software Engineering Project, Fall 2016. For Demonstration Only

Your Favorite Listings




Some kind of thing**\$900**

Haight Street San Francisco CA, 94190

Bed: 1 | Bath: 1 | Furnished: No | Distance from campus: 5.2 mi

RemoveGo to listing




Too many**\$1111**

4032 Noriega St San Francisco CA, 94122

Bed: 1 | Bath: 5 | Furnished: Yes | Distance from campus: 4.1 mi

RemoveGo to listing



No regrets**\$1400**

San Francisco CA, 94121

Bed: 5 | Bath: 5 | Furnished: Yes | Distance from campus: 5.3 mi

RemoveGo to listing

Screenshot 11. My Account – Favorite Listings page

Screenshots of Database

This section contains screenshots of our database as seen from MySQL Workbench.

The screenshot displays the MySQL Workbench interface. The main window shows the 'user' table in the 'f16g01' database. The table has 12 rows of data. The 'password' column contains encrypted values. The 'Action Output' pane at the bottom shows the execution of a query to select all rows from the 'user' table, limited to 1000 rows. The output shows 40 rows returned.

| # | userid | email | username | password | studentID | phone | bio | verified | firstname | lastname |
|----|--------|-----------------------|-----------|-----------------------------------|-----------|--------|------|----------|-----------|----------|
| 1 | 11 | ttse@mail.sfsu.edu | ttse | \$2y\$10\$BdKqVSk6FtTgTIAKbPze... | null | null | null | 1 | thomas | tse |
| 2 | 12 | ttse@mail.sfsu.edu | ttse | \$2y\$10\$QZwirAvZeuk2Rer4Xiek... | null | null | null | 1 | thomas | tse |
| 3 | 13 | thomasmt.games@g... | thom | \$2y\$10\$on2/B.EMNFuun/UJLST... | Nothing | Not... | N... | 0 | thom | nguyen |
| 4 | 14 | ekwong@gmail.com | ewong | \$2y\$10\$LSJDIK2bMtyNVIBKu17e... | Nothing | Not... | N... | 0 | evan | wong |
| 5 | 15 | trent@gmail.com | trent | \$2y\$10\$Zy/QoMISNd76kwHw4C... | Nothing | Not... | N... | 0 | trent | lu |
| 6 | 16 | ewong@gmail.com | superfox | \$2y\$10\$OxOUrOUCKYcdMTQwDs... | Nothing | 121... | S... | 0 | evan | wong |
| 7 | 17 | davidchauprogramme... | ditchau | \$2y\$10\$eJotHdSQUqYx/eoUF1TB... | Nothing | Not... | N... | 0 | David | Chau |
| 8 | 19 | samglus@gmail.com | frack | \$2y\$10\$9I3xVd5Yj5qkYPa10Ea... | Nothing | Not... | N... | 0 | sam | gluss |
| 9 | 20 | georgejone@gmail.com | hinbe | \$2y\$10\$RIDS07nAus291D6Cr10... | Nothing | Not... | N... | 0 | george | jone |
| 10 | 21 | teddyloid@mail.com | teddyloid | \$2y\$10\$EpRXCvgImBKrYikGzRP... | Nothing | Not... | N... | 0 | teddy | loid |
| 11 | 22 | StevenNguyen@email... | Steven | \$2y\$10\$ksQZP07uQSlgHrZBz hy... | Nothing | Not... | N... | 0 | Steven | Nguyen |
| 12 | 23 | Steven@Steven.com | Steven | \$2y\$10\$Fw9w/HkYez3/GZ98LH... | Nothing | Not... | N... | 0 | Steven | Nguyen |

Action Output:

| # | Time | Action | Message | Duration / Fetch |
|----|----------|--|--------------------|-------------------------|
| 28 | 21:40:48 | SELECT * FROM f16g01.listing LIMIT 0, 1000 | 42 row(s) returned | 0.096 sec / 0.00011 ... |
| 29 | 21:41:27 | SELECT * FROM f16g01.address LIMIT 0, 1000 | 42 row(s) returned | 0.080 sec / 0.00007 ... |
| 30 | 21:41:30 | SELECT * FROM f16g01.listingDetail LIMIT 0, 1000 | 41 row(s) returned | 0.081 sec / 0.00010 ... |
| 31 | 21:46:30 | SELECT * FROM f16g01.listingDetail LIMIT 0, 1000 | 42 row(s) returned | 0.081 sec / 0.00007 ... |
| 32 | 21:46:34 | SELECT * FROM f16g01.address LIMIT 0, 1000 | 43 row(s) returned | 0.081 sec / 0.00014 ... |
| 33 | 21:46:35 | SELECT * FROM f16g01.listing LIMIT 0, 1000 | 43 row(s) returned | 0.081 sec / 0.00011 ... |
| 34 | 17:19:16 | SELECT * FROM f16g01.message LIMIT 0, 1000 | 46 row(s) returned | 0.092 sec / 0.00004 ... |
| 35 | 22:13:29 | SELECT * FROM f16g01.user LIMIT 0, 1000 | 40 row(s) returned | 0.080 sec / 0.140 sec |

Screenshot 1. The user table. Note that the passwords are encrypted.

sfusweGroup

File Edit View Query Database Server Tools Scripting Help

MANAGEMENT

- Server Status
- Client Connections
- Users and Privileges
- Status and System Variables
- Data Export
- Data Import/Restore

INSTANCE

- Startup / Shutdown
- Server Logs
- Options File

PERFORMANCE

- Dashboard
- Performance Reports
- Performance Schema Setup

SCHEMAS

Filter objects

- f16g01
 - Tables
 - address
 - favoriteListing
 - listing
 - listingDetail
 - listingImage
 - message
 - user
 - userImage

Object Info Session

Table: listing

Columns:

- userid int(4)
- listingid int(4) AI PK
- price int(4)
- type varchar(100)
- status tinyint(1)
- title varchar(2000)

Query 7 listingDetail address user listing

1 * SELECT * FROM f16g01.listing;

Limit to 1000 rows

Result Grid

| # | userid | listingid | price | type | status | title |
|----|--------|-----------|-------|------|--------|----------------------------------|
| 1 | 11 | 6 | 2000 | room | 1 | Some kind of good house |
| 2 | 12 | 7 | 2600 | home | 1 | You won't regret getting this |
| 3 | 28 | 8 | 3000 | home | 1 | I love it and you shall too |
| 4 | 15 | 10 | 900 | room | 1 | Some kind of thing |
| 5 | 22 | 14 | 400 | room | 0 | Not too shabby |
| 6 | 22 | 15 | 300 | room | 0 | Close to campus! |
| 7 | 22 | 16 | 300 | room | 0 | Good price! |
| 8 | 22 | 18 | 100 | room | 0 | Tight price! |
| 9 | 22 | 19 | 1002 | room | 0 | Room boom! |
| 10 | 22 | 20 | 1001 | room | 0 | It's over 1000! |
| 11 | 22 | 21 | 1600 | room | 0 | For this place, you won't regret |
| 12 | 22 | 22 | 1200 | room | 0 | Room |

listing 1

Action Output

| # | Time | Action | Message | Duration / Fetch |
|----|----------|--|--------------------|------------------------|
| 29 | 21:41:27 | SELECT * FROM f16g01.address LIMIT 0, 1000 | 42 row(s) returned | 0.080 sec / 0.00007... |
| 30 | 21:41:30 | SELECT * FROM f16g01.listingDetail LIMIT 0, 1000 | 41 row(s) returned | 0.081 sec / 0.00010... |
| 31 | 21:46:30 | SELECT * FROM f16g01.listingDetail LIMIT 0, 1000 | 42 row(s) returned | 0.081 sec / 0.00007... |
| 32 | 21:46:34 | SELECT * FROM f16g01.address LIMIT 0, 1000 | 43 row(s) returned | 0.081 sec / 0.00014... |
| 33 | 21:46:35 | SELECT * FROM f16g01.listing LIMIT 0, 1000 | 43 row(s) returned | 0.081 sec / 0.00011... |
| 34 | 17:19:16 | SELECT * FROM f16g01.message LIMIT 0, 1000 | 46 row(s) returned | 0.092 sec / 0.00004... |
| 35 | 22:13:29 | SELECT * FROM f16g01.user LIMIT 0, 1000 | 40 row(s) returned | 0.080 sec / 0.140 sec |
| 36 | 22:13:42 | SELECT * FROM f16g01.listing LIMIT 0, 1000 | 41 row(s) returned | 0.081 sec / 0.00008... |

Query Completed

Screenshot 2. The listing table.

sfusweGroup

File Edit View Query Database Server Tools Scripting Help

MANAGEMENT

- Server Status
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INSTANCE

- Startup / Shutdown
- Server Logs
- Options File

PERFORMANCE

- Dashboard
- Performance Reports
- Performance Schema Setup

SCHEMAS

Filter objects

- f16g01
 - Tables
 - address
 - favoriteListing
 - listing
 - listingDetail
 - listingImage
 - message
 - user
 - userImage

Object Info Session

Table: listingDetail

Columns:

- listingid int(4) PK
- numberofBedrooms int(4)
- numberofBathrooms int(4)
- internet tinyint(1)
- petPolicy varchar(100)
- elevatorAccess text
- furnishing tinyint(1)
- airConditioning tinyint(1)

Query 7 listingDetail address listingDetail

1 * SELECT * FROM f16g01.listingDetail;

Limit to 1000 rows

Result Grid

| # | listingid | numberofBedrooms | numberofBathrooms | internet | petPolicy | elevatorAccess | furnishing | airConditioning | description |
|----|-----------|------------------|-------------------|----------|-----------|----------------|------------|-----------------|---------------|
| 1 | 6 | 5 | 5 | 0 | yes | yes | 1 | 0 | GO GO |
| 2 | 7 | 3 | 4 | 1 | no | no | 1 | 0 | I loved it... |
| 3 | 8 | 1 | 0 | 0 | no | no | 0 | 0 | Nice place. |
| 4 | 10 | 1 | 1 | 0 | yes | no | 0 | 0 | Would r... |
| 5 | 14 | 2 | 5 | 1 | No | No | 0 | 0 | This is a... |
| 6 | 15 | 1 | 10 | 0 | No | No | 1 | 1 | This hou... |
| 7 | 16 | 10 | 11 | 0 | no | yes | 1 | 0 | I |
| 8 | 18 | 11 | 20 | 1 | no | yes | 1 | 0 | What |
| 9 | 19 | 5 | 5 | 0 | yes | yes | 1 | 0 | GO GO |
| 10 | 20 | 5 | 5 | 0 | yes | yes | 1 | 0 | GO GO |
| 11 | 21 | 5 | 5 | 0 | yes | yes | 1 | 0 | GO GO |
| 12 | 22 | 2 | 5 | 0 | yes | yes | 1 | 0 | GO GO |

listingDetail 1

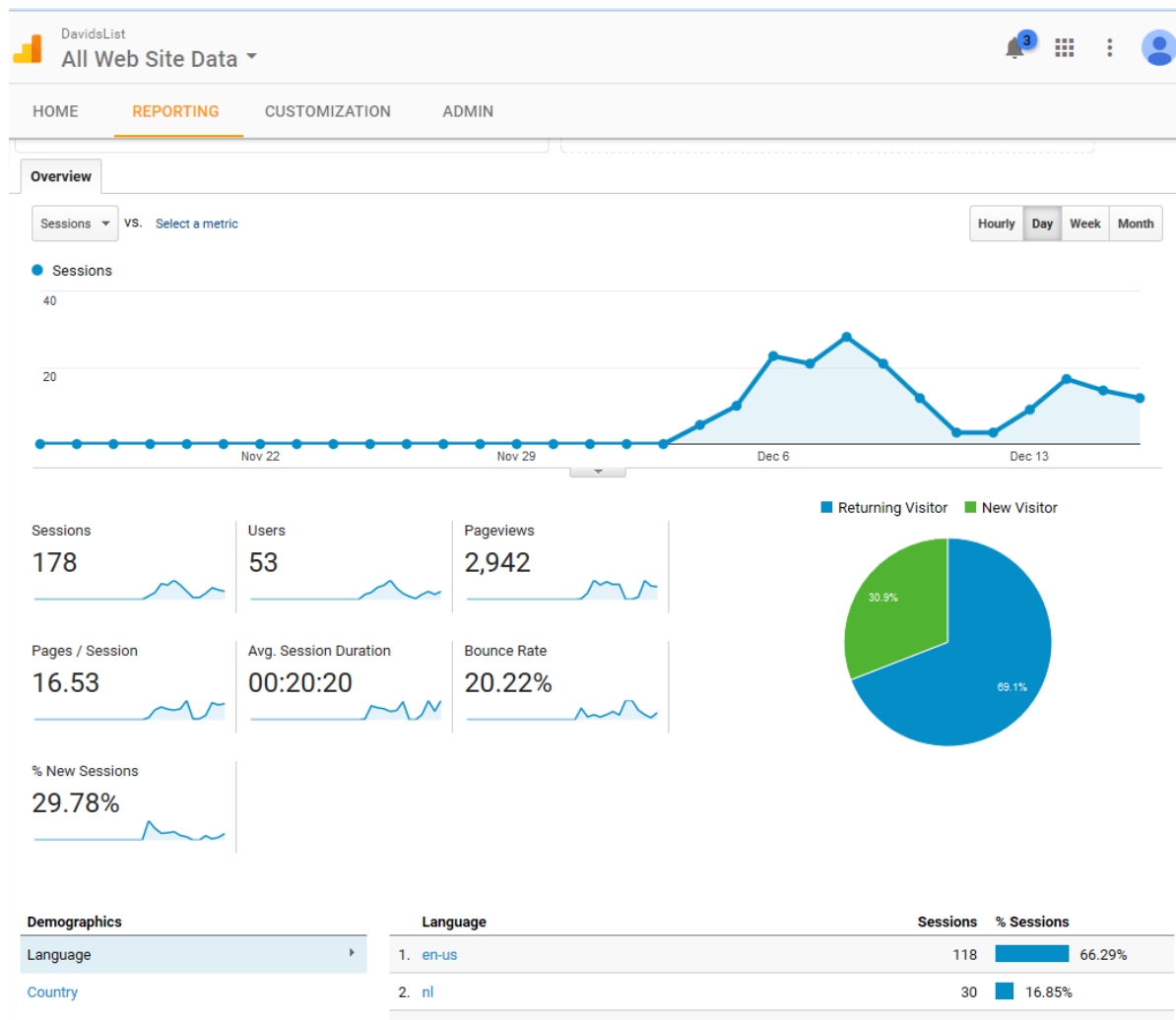
Action Output

| # | Time | Action | Message | Duration / Fetch |
|----|----------|--|--------------------|------------------------|
| 30 | 21:41:30 | SELECT * FROM f16g01.listingDetail LIMIT 0, 1000 | 41 row(s) returned | 0.081 sec / 0.00010... |
| 31 | 21:46:30 | SELECT * FROM f16g01.listingDetail LIMIT 0, 1000 | 42 row(s) returned | 0.081 sec / 0.00007... |
| 32 | 21:46:34 | SELECT * FROM f16g01.address LIMIT 0, 1000 | 43 row(s) returned | 0.081 sec / 0.00014... |
| 33 | 21:46:35 | SELECT * FROM f16g01.listing LIMIT 0, 1000 | 43 row(s) returned | 0.081 sec / 0.00011... |
| 34 | 17:19:16 | SELECT * FROM f16g01.message LIMIT 0, 1000 | 46 row(s) returned | 0.092 sec / 0.00004... |
| 35 | 22:13:29 | SELECT * FROM f16g01.user LIMIT 0, 1000 | 40 row(s) returned | 0.080 sec / 0.140 sec |
| 36 | 22:13:42 | SELECT * FROM f16g01.listing LIMIT 0, 1000 | 41 row(s) returned | 0.081 sec / 0.00008... |
| 37 | 22:13:54 | SELECT * FROM f16g01.listingDetail LIMIT 0, 1000 | 41 row(s) returned | 0.079 sec / 0.00017... |

Query Completed

Screenshot 3. The listingDetail table.

Google Analytics



Screenshot of Google Analytics Audience Overview of DauidsList

Team Member Contributions

Below are emails sent by each team member to all other team members on the subject of individual contributions to the project.

From: Nora Schinkel
Sent: Saturday, December 17, 2016 12:59 AM
To: Nora Schinkel
CC: Yansen Liu, Steven Nguyen, David Tran Chau, Imran Bin Irfan, Paul Derugin
Subject: CSC648 – Team Contributions

Hi guys,

My contributions to the project:

a) Contributions

- Team Lead
- Front end developer
- Built search and filter functionality
- Final design of pages and UI
- Fixed bugs in front end

b) Commits 100+

Good night!

From: David Tran Chau
Sent: Friday, December 16, 2016 7:05 PM
To: Nora Schinkel
CC: Yansen Liu, Steven Nguyen, Imran Bin Irfan, Paul Derugin
Subject: CSC648 – Team Contributions

a) Contributions

- Tech Lead/CTO
- Designed the architecture of the back-end
- Helped team members with learning git and other tools
- Helped team members solve problems they could not do on their own
- Assigned team members to work on parts of the back-end
- Fixed bugs related to the website, back-end or otherwise

b) Number of submissions on gitlab: 100+ commits

From: Paul Derugin
Sent: Monday, December 17, 2016 11:12 AM
To: Nora Schinkel
CC: Yansen Liu, Steven Nguyen, David Tran Chau, Imran Bin Irfan
Subject: CSC648 – Team Contributions

a) Contributions

- Back-end developer
- Created part of the back-end that handles Users, under the direction and advisement of Tech Lead
- Set up Google Analytics
- Proofread and revised documentation and prepared PDFs for submissions

b) Number of submissions to gitlab: 10

From: Imran Bin Irfan
Sent: Friday, December 16, 2016 9:45 PM
To: Nora Schinkel
CC: Yansen Liu, Steven Nguyen, David Tran Chau, Paul Derugin
Subject: CSC648 – Team Contributions

a) Contributions

- Back-end developer
- Created part of the back-end that handles "Listings" under the direction and advisement of the Tech Lead/CTO.
- Some QA on small details
- Helped with organization of Documentation.

b) Number of submissions on gitlab: 20+

From: Yansen Liu
Sent: Friday, December 16, 2016 9:55 PM
To: Nora Schinkel
CC: Steven Nguyen, David Tran Chau, Imran Bin Irfan, Paul Derugin
Subject: CSC648 – Team Contributions

a) Contributions

- Front-end developer
- UI design draft and mockup draft
- Initial layout of rent out page, userProfile page, and My listing page
- Create google map API function for counting distance
- Fixed UI bugs

b) Number of submissions on gitlab: 10+

From: Steven Nguyen
Sent: Friday, December 16, 2016 7:05 PM
To: Nora Schinkel
CC: Yansen Liu, David Tran Chau, Imran Bin Irfan, Paul Derugin
Subject: CSC648 – Team Contributions

a) Contributions

- Initial layout of home, search results, listing, login, register, favorite, messaging pages.
- Displaying search results, user listing results, user favorites on front-end.
- Created layout and populated fields in chat messaging pages.
- Fixed various UI bugs.
- QA

b) Number of submissions on gitlab: 80+.