Guttersnipe (0.3)

Software Requirement Specifcations

Revision History

Date	Name	Description	Author
September 14, 2016	0.3	Draft	Mitchell Verter

Table of Contents

Part 1: PROPOSAL

01.01

PROPOSAL: GUTTERSNIPE

1. What is the site/app?

Guttersnipe is a web portal and mobile app that caters to anarcho-communist street youth (and adults) who desire to subvert capitalism by sharing resources.

It will enable people to broadcast to each other locations of shareable resources, distributed among four main categories:

1. Housing: squats, abandoned buildings, punk houses, etc.
2. Food: dumpsters, Food Not Bombs, free meals, etc.
3. Healthcare: clinics, needles, condoms, etc.
4. Movement: rideshares, train maps

Eventually, other types of resource sharing will be integrated into the application.

Each Shareable will be characterized as a

1. Thing: Categorization and Tags
2. Space: Geolocation
3. Time: Schedule

Further development will require a close study of the writings of Kropotkin and Fourier.

2. What need does this meet? or problem does it solve?

This application serves the urgent need to overthrow capitalism by helping people to self-organize outside and beyond the market of commerce.

The ultimate intention is to facilitate the creation of alternate avenues of exchange, freely organized by free individuals.

3. Who is going to go/use to this site/app?

In the current incarnation, it is mostly aimed towards the freegans gutterpunks, who live off of dumpstered food, live in squatted housing, and travel by hopping trains.

As we get a better sense on the needs of the anticapitalist community and possibilities for alternative organizing, we will expand the possibilities for anti-market resource sharing.

4. Why will they go to this site/app?

To find food, clothing, shelter, etc.

5. Why will they keep coming back to your site/app?

See above.

6. How is it different from other similar sites?

There are similar sites of various types, but many of them have certain faults.

There is a site called rideshare.com; there is a site named couchsurfer.com; there is freecycle.com, which allows the sharing of goods.

These are all laudable efforts. Some of these are marred by an underlying desire for profit. But some of them are motivated out of genuine desire to promote Mutual Aid.

The very mission of Guttersnipe.net will be to promote the organization of the lumpenproletariat and to create alternative exchanges outside of capitalism. This mission will enable Guttersnipe.net to be singularly focused on this goal.

It will thus be able to bring together whatever resources necessary for the undermining of capitalism: the various services— such as squatting, dumpster diving, hitchhiking, train hopping, resource sharing, etc — will be coordinated on a singular web portal.

In addition, there are several web portals that are dedicated towards the promotion of anarcho-communist goals..

Such sites are

- Freegan.info
- Picture the Homeless
- Squat.net
- Foodsharing (Germany)

Many of our initial design specifications will be taken from the freegan group and Picture the Homeless.

In addition, we intend Guttersnipe to be cross platform, available both via the web and as a mobile app.

To my knowledge, there are not yet any apps dedicated with such a task.

7. What steps will a person go through interacting with the site/app?

Most of the various interactions will be handled using forms.

The various services offered by Guttersnipe all boil essentially boil down to two types of transaction:

1. information submission;
2. information retrieval.

One person posts about an abandoned building or a good dumpster; another person searches for such information.

** All Users can view a Shareable or search all Shareables.

Shareables can be searched and results will be shown with the following data:

1. Thing: Description, Categorization, Tags
2. Space: Map
1. Time: Calendar

** Registered Users (known as “Guttersnipes”) can add, edit, and delete Shareables. Guttersnipes may also rate Shareables, comment on Shareables, and erase these comments.

Guttersnipes can manage their profiles, which contains their availability schedules, names, account expiration date, optional email, optional password, optional location, and optional contact info.

All Guttersnipe user accounts expire after a certain date, but this date may be extended at any time.

Guttersnipes can communicate to each other messages that contain Schedules and Text in order to coordinate a meeting time.

** Caretakers

Caretakers are Guttersnipes with administrative capacities.

They can delete any Guttersnipe account, any Shareable, and any Comment.

Practical Constraints

Security

We will have to build in a security infrastructure in the project in order to guarantee anonymity of transactions.

Tor will be used to anonymize transactions.

Whisper will be used to encrypt communications and interactions.

The host server will have to be able to run Python/Flask.

The client will have to have an accessible webview for the deployment of Javascript.

We will have to design a User Interface that supports a 1.8 inch QQVGA (128x160) Display to support the phones provided by government assistance http://newsroom.assurancewireless.com/custom-page/product-information

01.02
Technical Introduction

1.1. Purpose

Guttersnipe promises to be a platform for individuals and groups to freely share resources such as food, shelter, and medicine.

This Document will detail the features of Guttersnipe, and will serve as a guide to developers, and as a legal document and users manual for prospective clients.

1.2. Scope.

1.2.1. Users

1.2.1.1. User

All System users can search the Shareables view a single Shareable, and read the rating and the comments ascribed to it.

1.2.1.2. Vagrant: This class represents all visitors to the site who has not yet signed in as a member.

The Vagrant class inherits all the properties and functionalities of the base class User.

All Vagrants may register to become a user, may login as a user, and may retrieve a lost username or password.

1.2.1.3. Guttersnipe: This class represents a user who has registered for an account in the system.

This class inherits all the properties and functionalities of the base class User.

In addition, the Guttersnipe can exercise control over its own account.
The Guttersnipe may edit its own profile, its own location and edit its own availability schedule.
It may renew its membership and change its password.
It may logout of its account.

The Guttersnipe may also create a new Shareable, and edit or

delete a Shareable that it has created.

The Guttersnipe may rate or comment on a Shareable and may delete a previous comment.

The Guttersnipe may send messages and send the schedules of other Guttersnipes. It may read messages and schedules as well. It may block any other Guttersnipe except for a Caretaker.

1.2.1.4. Caretaker: The Caretaker class represents the administrative users of the System.

Caretakers have all the same properties and functionality as the Guttersnipe, but their functionalities are unlimited in scope.

The Caretaker may edit or delete any Shareable, may delete any User, and may delete any comment.

1.2.2. Business Objects

1.2.2.1. Shareable: Each shareable is classified according to its categorization and description, its schedule, and its location.

1.2.2.1.1. Time: Each Shareable is available at a certain period of time (e.g. every Monday from 2PM-4PM). Time information provides these schedules as well as a note for further clarification.

1.2.2.1.2. Space: Each Shareable is located in a certain place (e.g.. Times Square). Space information provides longitude and latitude information, as well as textual information detailing the canonical and alternate information, and any additional notes

1.2.2.1.3. Thing: Each Shareable is characterized as a certain Type (food, shelter, medical, travel) and can have certain subtypes. Shareables can also be given “Tags” for further categorization. Textual information about how to acquire the shareable and other notes will also be included.

1.2.2.2. Shareable Annotations

1.2.2.2.1. Ratings: Guttersnipes will be able to rate shareables

1.2.2.2.2. Comments: Guttersnipes can add comments to shareables.

1.2.3. Communications

1.2.3.1.

1.3. Acronyms and Abbreviations

1.3.1. V: Vagrant

1.3.2. G: Guttersnipe [User]

1.3.3. B: Caretaker

1.3.4. SRS: Software Requirements Specification

1.3.5. GUI: Graphical User Interface.

1.3.6. FSM: Finite State Machine.

1.3.7. 1 DB: Database.

1.3.8. 1 ERCD: Entity-Relation Class Diagram.

1.4. Summary

The rest of this SRS is organized as follows:

Section 2: Gives the overall description of the Guttersnipe application. It contains the Use-Case diagram and descriptions for Guttersnipe. Section 2 also contains the assumptions and dependencies of the system.

Section 3: Gives specific software requirements and functionalities in the form of Mini Use- Case diagrams along with accompanying Collaboration diagrams, Finite State Machine of the system, and ER Class diagram of the system. This section also contains supplementary software requirements of the systems.

Section 4: GUI Components: The appendix contains user interface prototypes for the system, including many screenshots from the 0.2 release of the application.

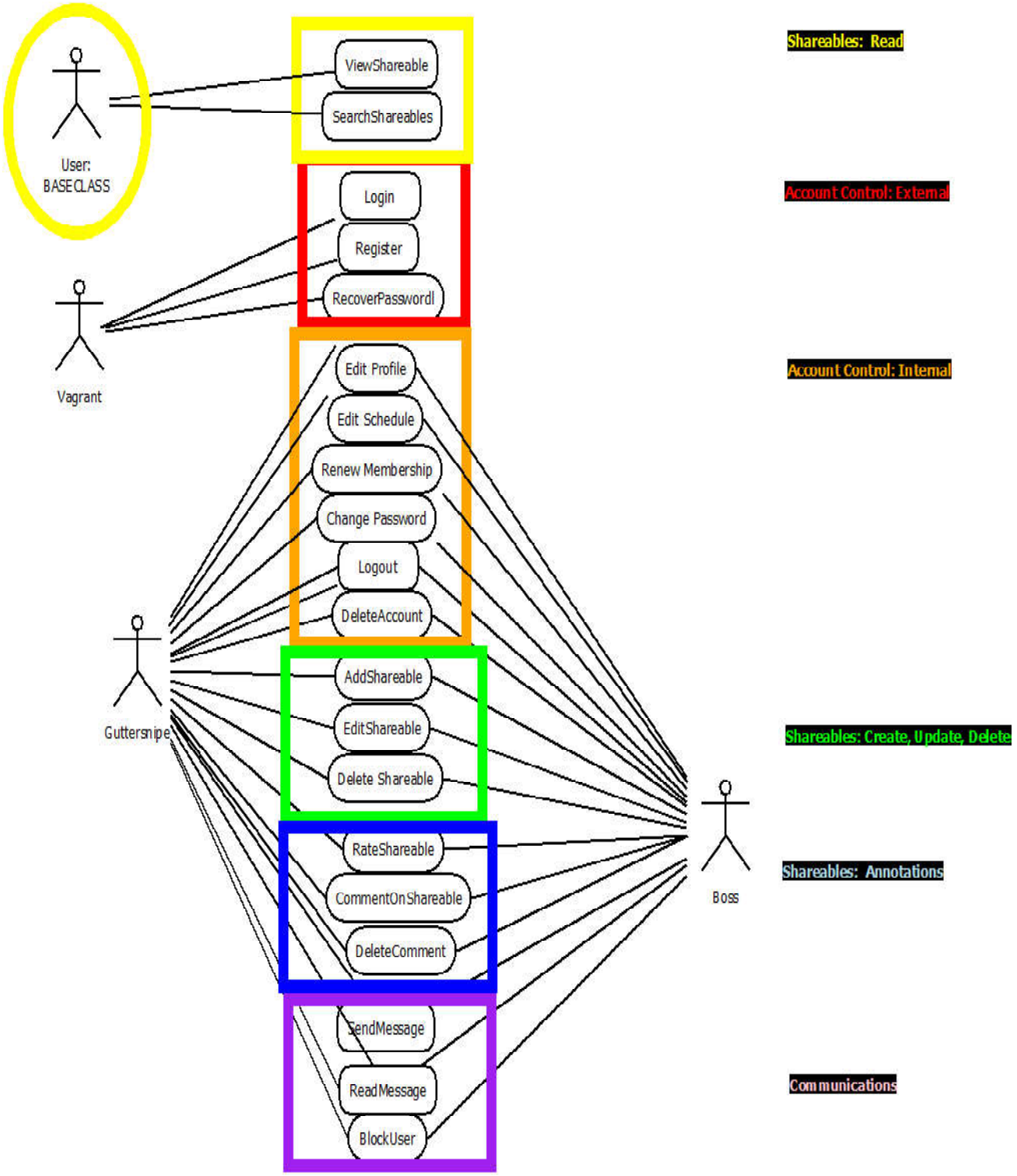
02: Overview

02.01: Use Case Diagrams and Descriptions

02.02: Server/Client Assumptions and Dependencies

2. Overview

2.1 User Case Diagram and Descriptions



A. 02.01.01

B. Usecases: USERS

A. User (U)

i. Shareables (Read)

a. View: Any U may view a search result.

b. SearchShareables: Any U may search for Shareable by Thing (Categorization, Tags), Space (Geolocation), and Time (Schedule)

B. Vagrant (V)

i. Account Management (External)

a. Login: Any V can login to the system, which transforms V into a G or B .

b. Register: Any V may register to become a G.

c. RetrieveUsername: Any V may request a username reminder.

d. RecoverPassword: : Any V may request a password reminder.

C. Guttersnipe (G)

i. Account Management (Internal)

a. EditProfile: Can edit information on own account.

b. EditSchedule: Can edit availability schedule.

c. RenewMembership: Can renew the terminal date of membership

d. Logout: Can log out of own account.

e. ChangePassword: Can reset own password.

ii. DeleteAccount: Can delete own account. Shareables (Create, Update, Delete)

a. CreateShareable: Can add a Shareable resource.

b. UpdateShareable: Can update Shareable created by self.

iii. DeleteShareable: Can delete Shareable created by self.Shareables (Annotate)

a. RateShareable: Can rate any shareable

b. CommentOnShareable: Can comment on any shareable.

c. DeleteComment Can delete own comment.

iv. Communications

a. SendMeetup: Can communicate message (schedule + text) from other Guttersnipe.

b. ReadMessage: Can read message inbox.

c. SetSchedule: Can set availability calendar.

d. BlockUser: Can block any other user except Caretaker.

D. Caretaker (C)

Caretaker has same capabilities as Guttersnipe, but they are unrestricted to apply to all system users. The relevant overrides are as follows:

i. UpdateShareable: Can update Shareable created by any user.

ii. DeleteShareable: Can delete Shareable created by any user.
*** Deleting a Shareable account triggers DeleteAccount, DeleteComments and DeleteShareables for that User.**

iii. DeleteComment Can delete Comment written by any user.
*** Deleting a Comment triggers DeleteAccount, DeleteComments and DeleteShareables for that User.**

iv. DeleteAccount: Can delete the account of any user, except for another Caretaker.
*** Deleting a user account triggers DeleteComments and DeleteShareables for that User.**

v. BlockUser: Triggers a DeleteAccount option for the blocked user.
*** Blocking a user account triggers DeleteAccount, DeleteComments and DeleteShareables for that User.**

02.02.01

Client / Server
Assumptions and Dependencies

Previous release

The previous release (0.2.1.5) of Guttersnipe was a MEAN stack application, utilizing Mongo/Mongoose, Node, Express, and Angular 1.x.

The deployment of a node application requires a server or PAAS that supports a node engine. We find this constraint too restrictive because many servers do not have a node engine, including the servers where we hope to do our initial deployments.

Although Mongo/NoSql is a fine technology, we believe that rapid, optimized database queries can best be done with an SQL database, which will obviate the need for a lot of the “middle-tier” post-processing of results from a database query.

Current release

Client. The client requires a contemporary browser that supports standard HTML 5, CSS 3, and Javascript. It will use Angular 2.x as a front-end framework.

The application will be ported to mobile devices initially by taking advantage of libraries like phonegap which allow one to use the device webview to deploy web interfaces. Native Android/ iOS ports may be attempted as well.

For backend technologies, we sought a technology that could easily be ported to a variety of servers where no superuser access is required. We dislike bulky frameworks, preferring to add components as we need them. To this end, we have chosen the Flask / Python framework.

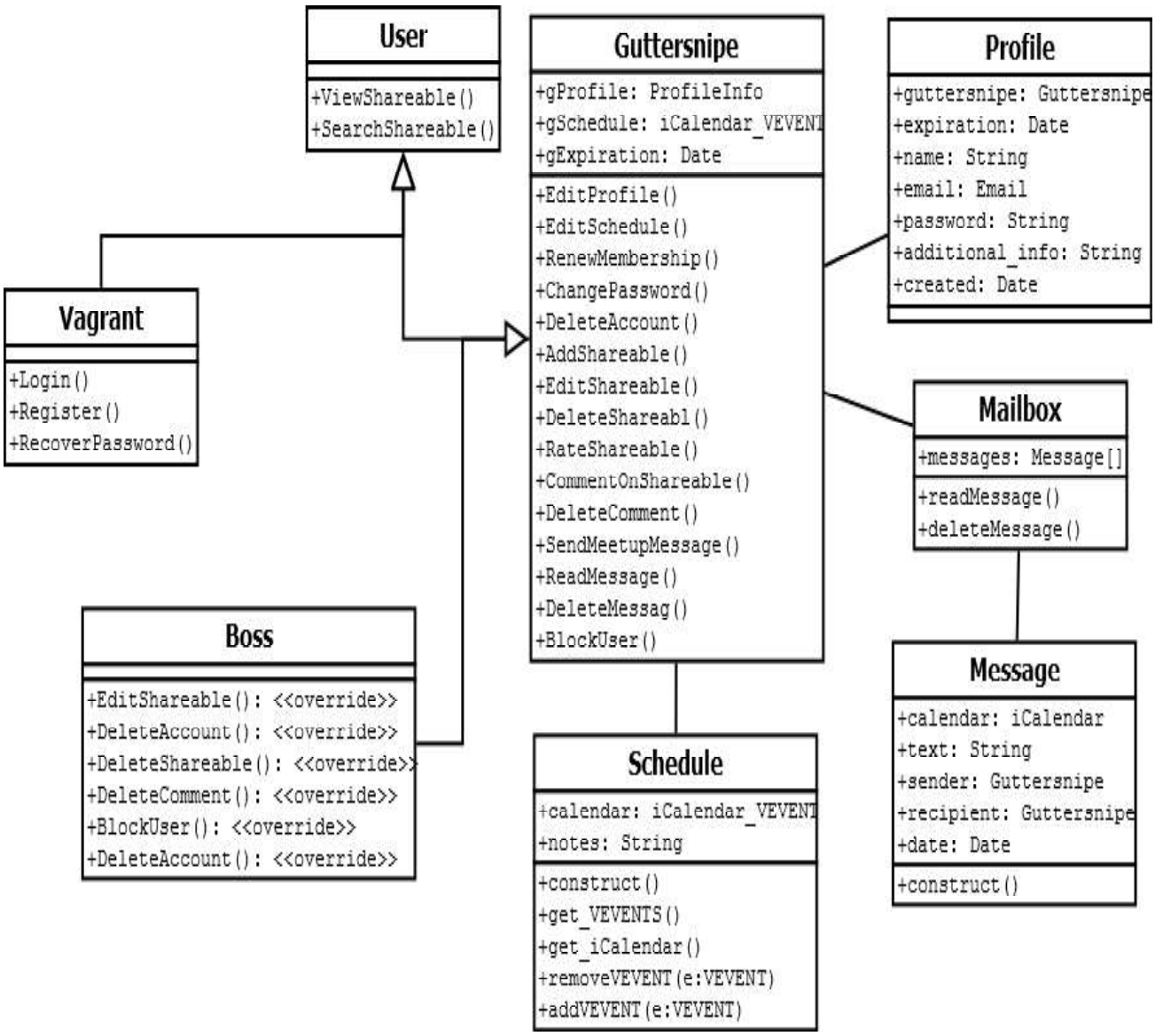
The most important platform to develop upon are the free phones given by government assistance (http://newsroom.assurancewireless.com/custom-page/product-information). Some of these have 1.8 inch screens. We are currently unsure of what toolkit we will need to use for the front end.

SPECIFIC REQUIREMENTS

Class D&D
(diagrams && definitions)

User Class

(A) Diagram



03.02.01 User Class Definitions

User Class (abstract)

A User represents anyone using the application. It is an abstract class, so any actual user will be classified as a Vagrant, Guttersnipe, or Caretaker.

* Methods:
++ViewShareable(): Any User may view a shareable
++SearchShareable(): Any User may search through shareables by selecting filters for Thing, Space, and Time

---

Vagrant (extends the User Class)

A Vagrant represents someone who is browsing the site and has not yet logged in

* Methods:
++Login(): A Vagrant may log in to its own account
++Register() : A Vagrant may register to become a user
++RecoverUsername: A Vagrant may request to recover its Guttersnipe username
++RecoverPassword: :A Vagrant may request to recover its Guttersnipe username

---

Guttersnipe (extends the User Class)

A Guttersnipe represents a registered User who has logged into its own Account.
A
*Attributes:
++gProfile: ProfileInfo : Personal Information about the Guttersnipe.
++gSchedule: iCalendar_VEVENT: Availability information for the Guttersnipe
++gLocation: Space. The Guttersnipe's registered location
++gExpiration: Date. A Guttersnipe's account is a Temporary Autonomous Identification, which has an expiration date. This is done for security reasons. The expiration date may be extended at any time.
++ isAdmin: Identifies whether user is Guttersnipe or Caretaker.

* Methods:

++EditProfile(): A guttersnipe may edit its own profile
++EditSchedule(): A guttersnipe may edit its own schedule
++EditLocation: A Guttersnipe may edit its own location.
++RenewMembership(): A Guttersnipe may renew the termination date of its membership.
++ChangePassword(). A Guttersnipe may change its own password.
++DeleteAccount(): A Guttersnipe may delete its own account.
++AddShareable(): A Guttersnipe may add a Shareable.
++EditShareable(): A Guttersnipe may edit a Shareable that it has added.
++DeleteShareable(): A Guttersnipe may delete a Shareable that it has added.
++RateShareable(): A Guttersnipe may rate any Shareable
++CommentOnShareable(): A Guttersnipe may comment on any Shareable
++DeleteComment (): A Guttersnipe may delete any comment that it has written.
++SendMeetupMessage(): A Guttersnipe may send a message to another Guttersnipe. This message contains schedule and text. It will enable
++ReadMessage(): A Guttersnipe may read a message.
++DeleteMessage(): A Guttersnipe may delete a message.
++BlockUser(): A Guttersnipe may block another

Caretaker

A Caretaker is a registered user with administrative capacities. It has the same functionality as a Guttersnipe, but extends several of its methods.

* Methods:
++EditShareable() : A Caretaker may edit any shareable.
++DeleteAccount(): A Caretaker may delete any Guttersnipe account
++DeleteShareable () : A Caretaker may delete any shareable
++DeleteComment () : A Caretaker may delete any comment
++BlockUser () : When a Caretaker blocks a Guttersnipe, it may also delete that Gutttersnipe's account.

03.02.01 User-Associated Object Definitions

1. Profile

The Profile contains personal information about the Guttersnipe or Caretaker. Only username is a required attribute. All others are optional.

a. *Attributes:
   i. username: The name user uses to log in
   ii. email (optional)
   iii. full_name (optional)
   iv. password (optional)
   v. additional_info (optional): =Any additional details user wishes to add.

2. AvailabilitySchedule (optional)

A Guttersnipe may fill out a schedule to indicate it is most available for activities.

a. *Attributes:
   i. availabilityCalendar: The user's availability
   ii. notes; Any additional details

3. UserLocation (optional)

A Guttersnipe may indicate its location for participation in activities.

a. *Attributes:
b. Longditude
c. Latitude:
d. notes; Any additional details

4. Mailbox

A Guttersnipe has a mailbox where it can send and read messages

a. *Attributes:
    i. messages: collection of messages.

5. Message

A message is intended to communicate between Guttersnipes their availability for activities.

a. Attributes:
    i. calendar: iCalendar: The user's availability for a certain activity.
    ii. text = Text of the message
    iii. sender Guttersnipe who sent message
    iv. recipient = Guttersnipe who receives message
    v. sendDate = Time Message was sent

03.02.01.05
Guttersnipe Component Classes

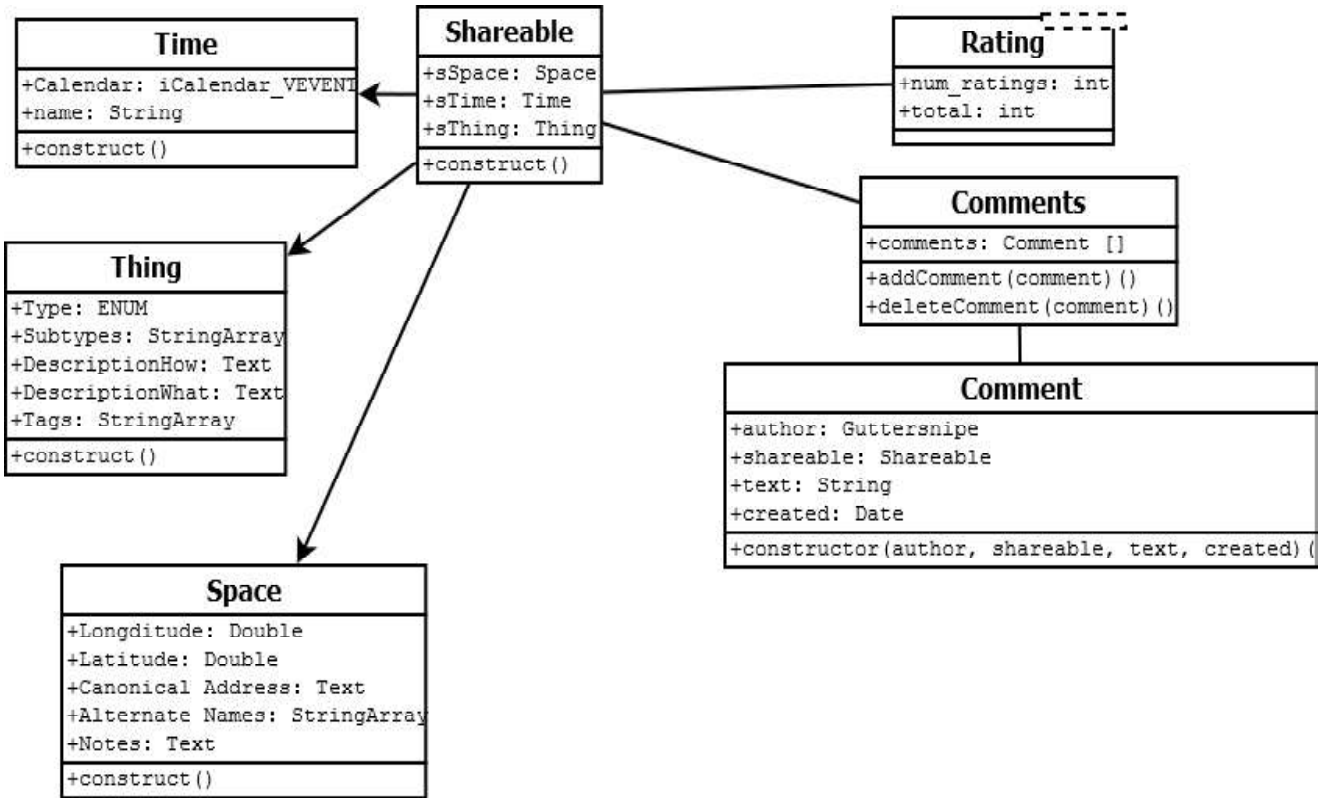
1. **Message**
    a. Attributes:
        i. calendar: iCalendar
        ii. text: String
        iii. sender: Guttersnipe
        iv. recipient: Guttersnipe []
        v. date: Date
    b. Functions
        i. __construct()

2. **Profile**
    a. Attributes:
        i. guttersnipe: Guttersnipe
        ii. expiration: Date
        iii. name: String
        iv. email: Email
        v. password: String
        vi. additional_info: String
        vii. created: Date
    b. Functions
        i. __construct()

3. **Schedule**
    a. Attributes:
        i. calendar: sCalendar_VEVENT
        ii. notes: String
    b. Functions
        i. __construct()
        ii. get_VEVENTs() // Returns array of VEVENTs
        iii. get_iCalendar() // Returns iCalendar
        iv. removeFromSchedule(VEVENT) // Removes VEVENT

Shareable Class

(A) Diagram



A. 03.02.02 Shareable Class and Parts

1. Shareable

a. *Attributes:

i. thing: Thing

ii. space: Space

iii. time: Time

b. Functions

i. __construct(thing, space, time) // Constructor for the Shareable class

2. Thing

a. Attributes:

i. type: ENUM

ii. subtypes: String []

iii. descriptionHow: String

iv. descriptionWhat: String-

v. tags: StringArray []

b. Functions

i. __construct()

3. Space

a. *Attributes:

i. longditude: Double

ii. latitude: Double

iii. canonical Address: String

iv. alternate Ñames: String[]

v. notes: String

b. Functions

i. __construct()

4. Time

a. *Attributes:

i. calendar: sCalendar_VEVENT

ii. notes: String

b. Functions

i. __construct()""

5. Rating

a. Attributes:

i. num_rating: int

ii. total: int

b. Functions

i. __construct()

ii. getRating() : float""

6. Comments

a. Attributes:

i. comments: Comment []

b. Functions

i. __construct()

ii. addComment()

iii. deleteComment()

iv. deleteByGuttersnipeID(int gsnipe_id)

7. Comment

a. Attributes:

i. author: Guttersnipe

ii. shareable: Shareable

iii. text: String

iv. created: Date

b. Functions

i. function __construct($commentID, $commentText, $userName, $timestamp) // Constructor for the Comment class

B. Collaboration Diagrams, Database

8. Collaboration Diagram Objects:

a. Managers

i. (SearchManager, BrowseManager, MovieViewManager, LoginManager, RegisterManager, MovieRatingsInterface, MovieProcessor, CommentManager, CartManager, CheckoutManager, PasswordControl, LogoutControl, CommentControl, FlaggedCommentsManager, WarningSystem, DeleteManager)

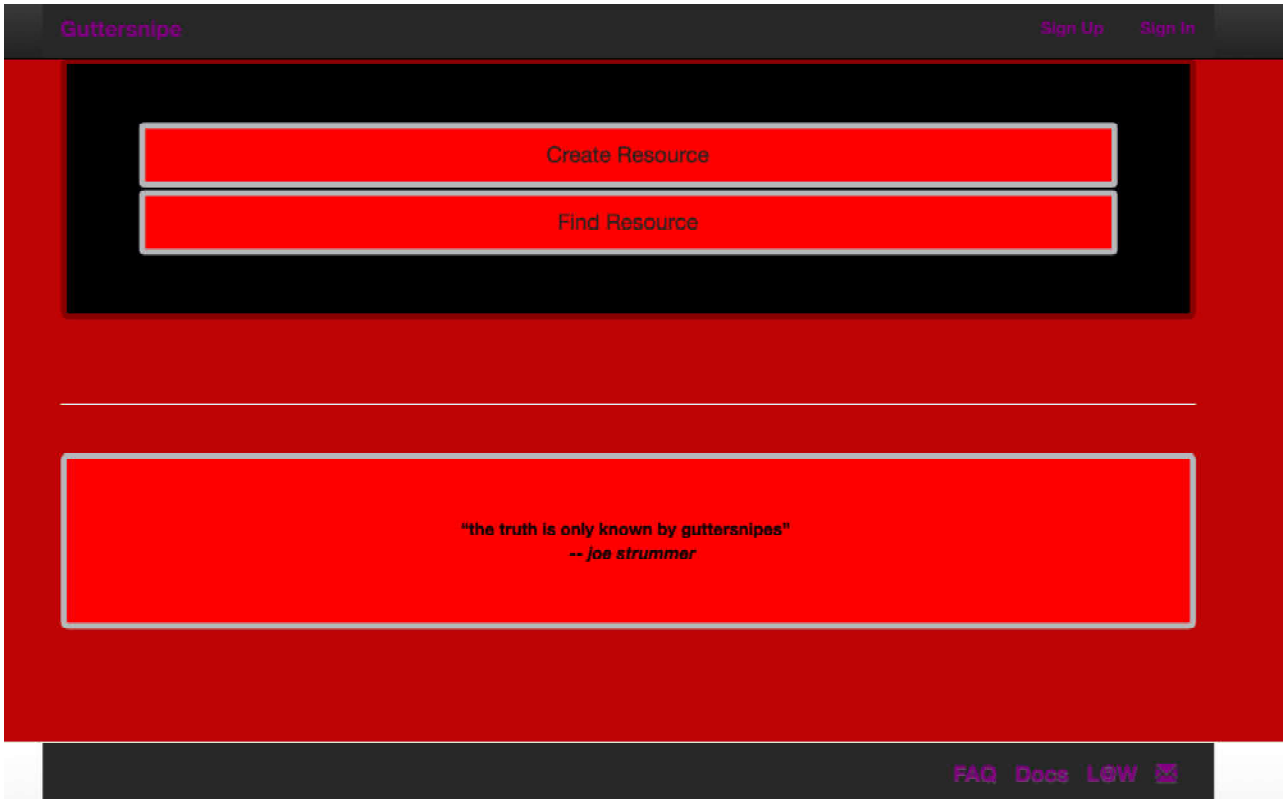
b. GUI es

i. (SearchGUI, BrowseGUI, ViewMovieGUI, LoginGUI, MainCustomerPage, MainAdminPage, RegisterGUI, RegistrationSuccessGUI, MoviesBought, MoviePlayerInterface, CommentGUI, ViewCartGUI, CartGUI, CheckoutGUI, ConfirmationGUI, ResetPasswordGUI,

GUI COMPONENTS

Screenshots from 0.2 release and Future Wireframes

04.01.01
Front Page:



Front Page shows

- Top Menu Links
    - Home (here)
    - Sign Up
    - Sign In
- Body Links
    - Create Resource
    - Find Resource
    - "the truth is only known by guttersnipes" – joe strummer
- Bottom Menu Links
    - FAQ
    - Documentation
    - Legal
    - Contact

04.02.01 CreateShareable Start

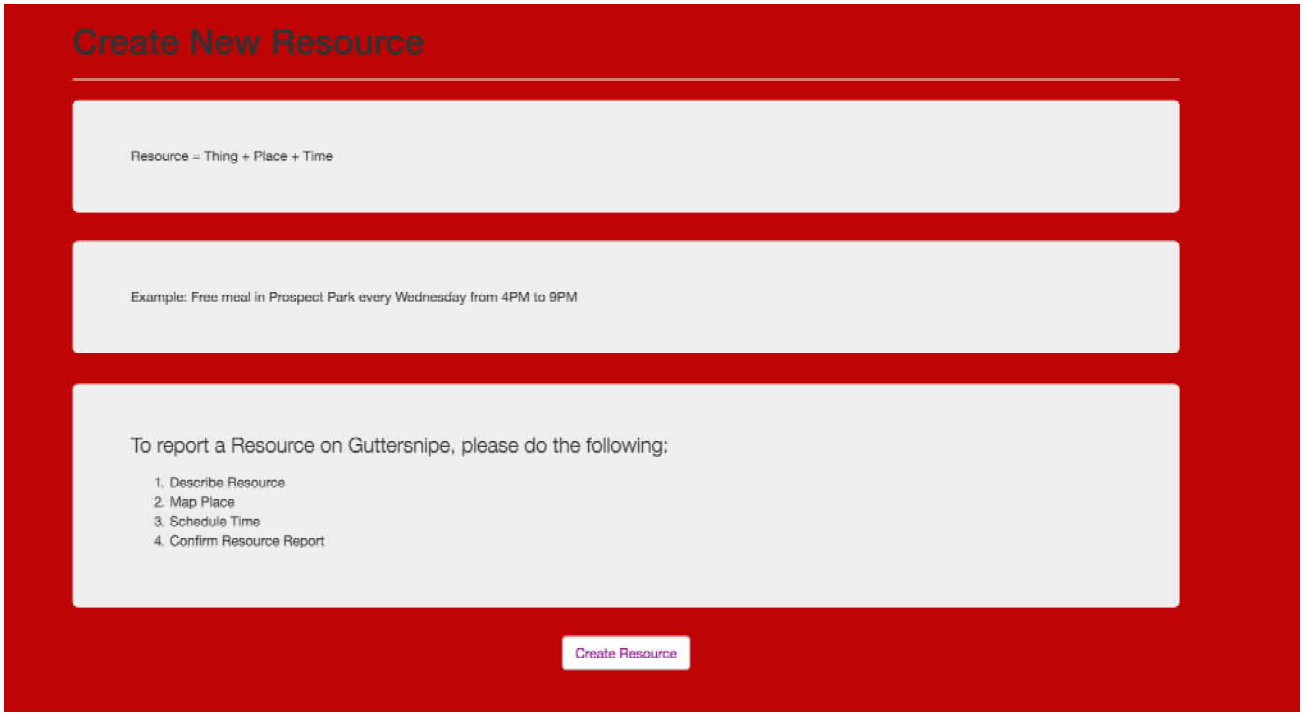
In order to add a Shareable to the System, the User can enter data in the following Wizard.

This represents the first step of that wizard.

It shows buttons for consent and negation.

Create New Resource
Through your usage of Guttersnipe, you agree to not put yourself or any other person in legal jeopardy.
Negate Consent
You are free to use Guttersnipe as you wish.

04.02.02 CreateShareable Instructions

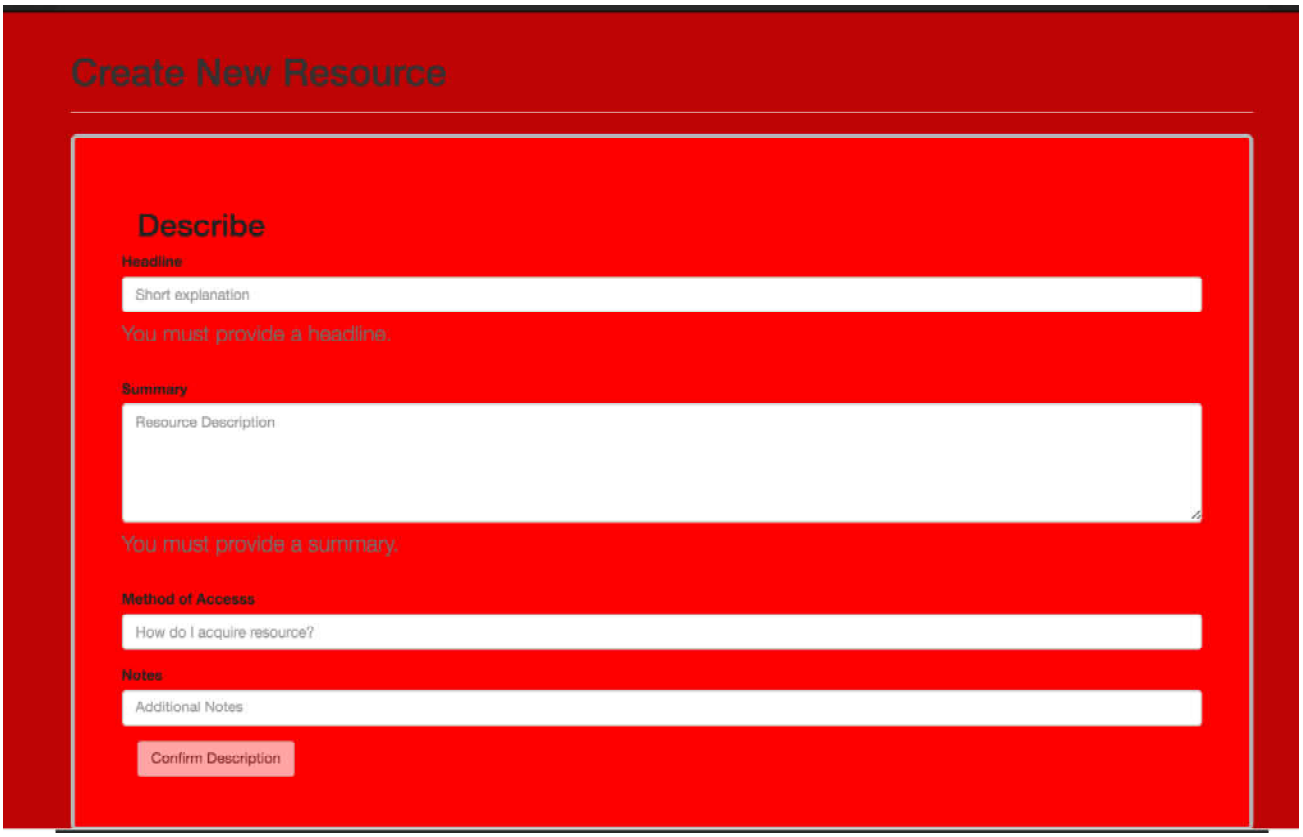


Instructions on how to create Shareable

Create New Resource
Resource = Thing + Place + Time
Example: Free meal in Prospect Park every Wednesday from 4PM to 9PM
To report a Resource on Guttersnipe, please do the following:

Describe Resource
Map Place
Schedule Time
Confirm Resource Report

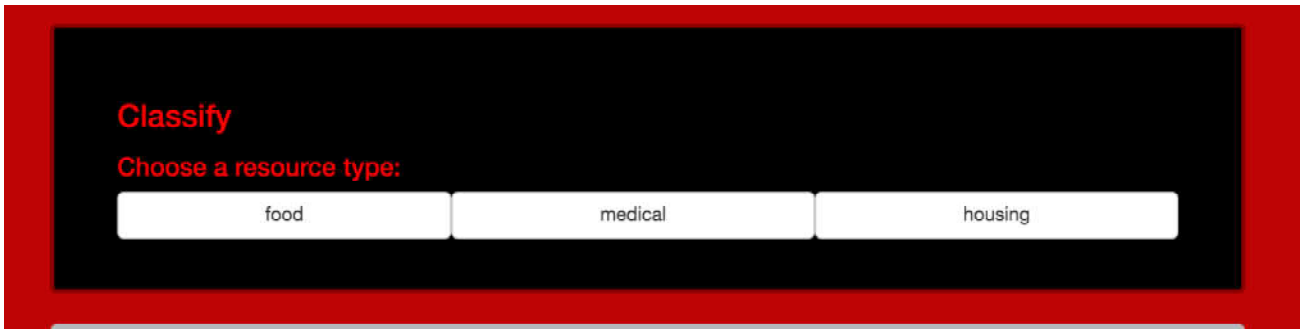
04.02.03 CreateShareable Describe



Form for entering textual data about the Shareable

- Headline
- Summary
- Method of Access
- Additional Notes

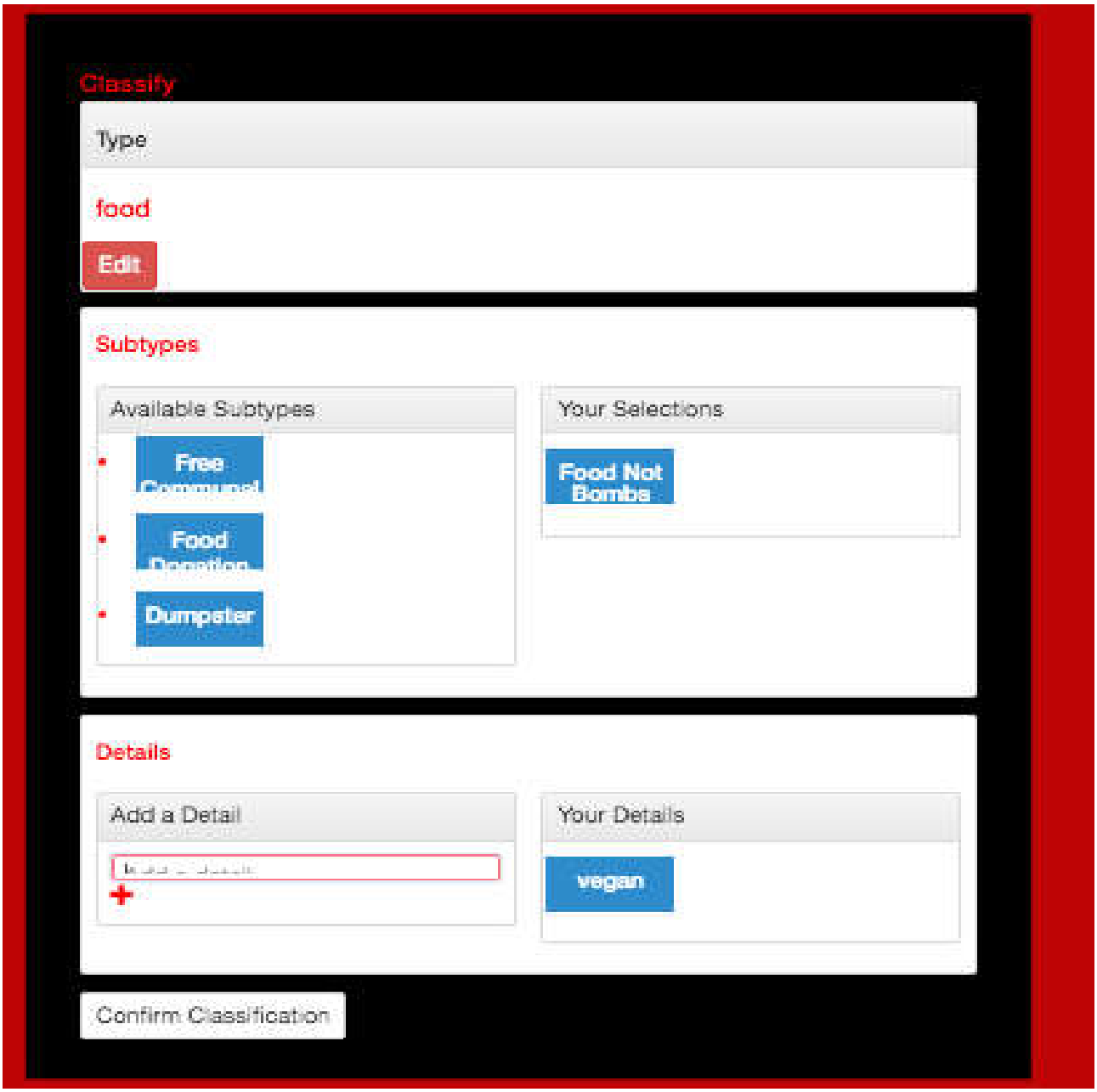
04.01.04(a) CreateShareable Classify (1)



Allows Guttersnipe to categorize Shareable as System-defined type

- Food
- Medical
- Housing
- Transport (new)

04.02.04(b) CreateShareable Classify (2)

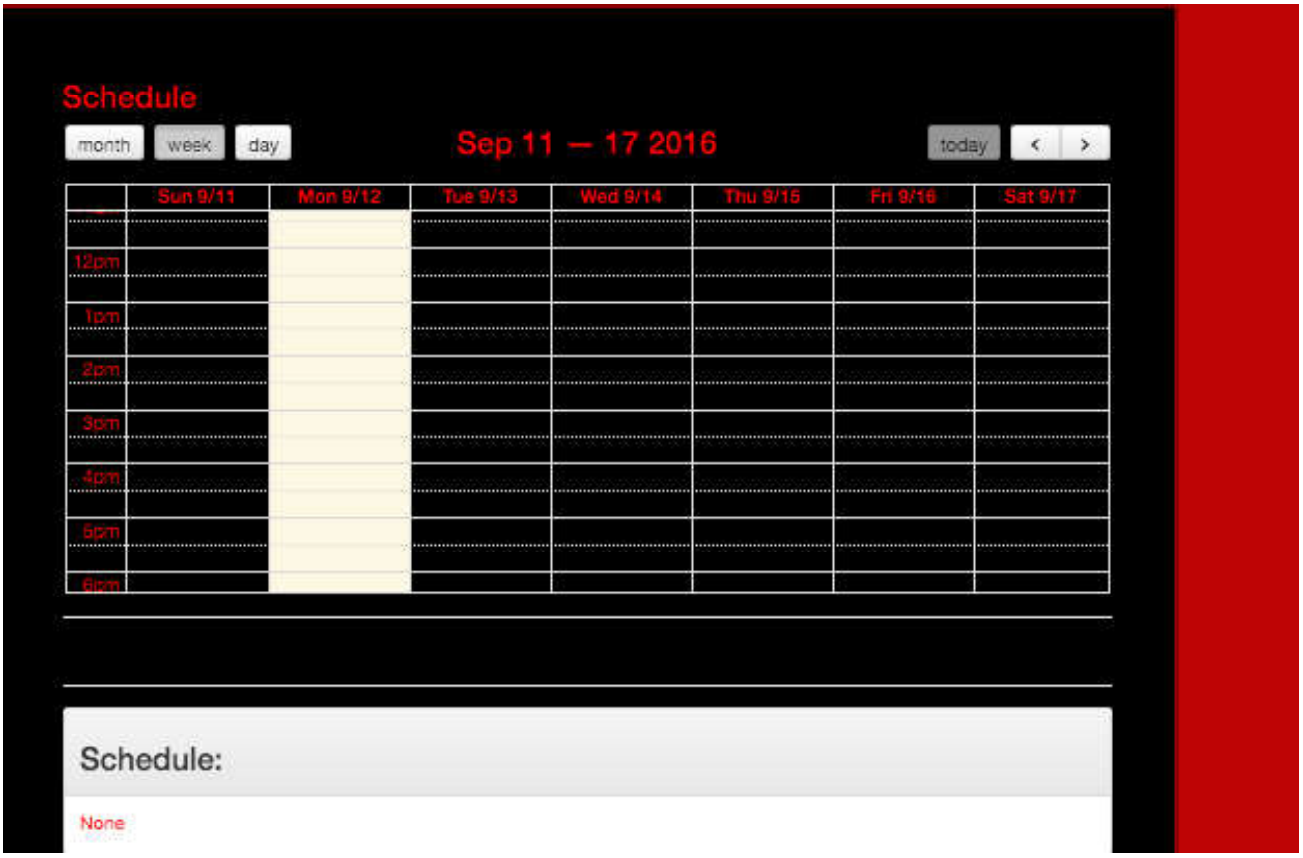


Allows Guttersnipe to add system-defined **Subtypes** and Guttersnipe-defined **Tags** to Shareable.

04.02.05(b)
CreateShareable
Map Shareable Location

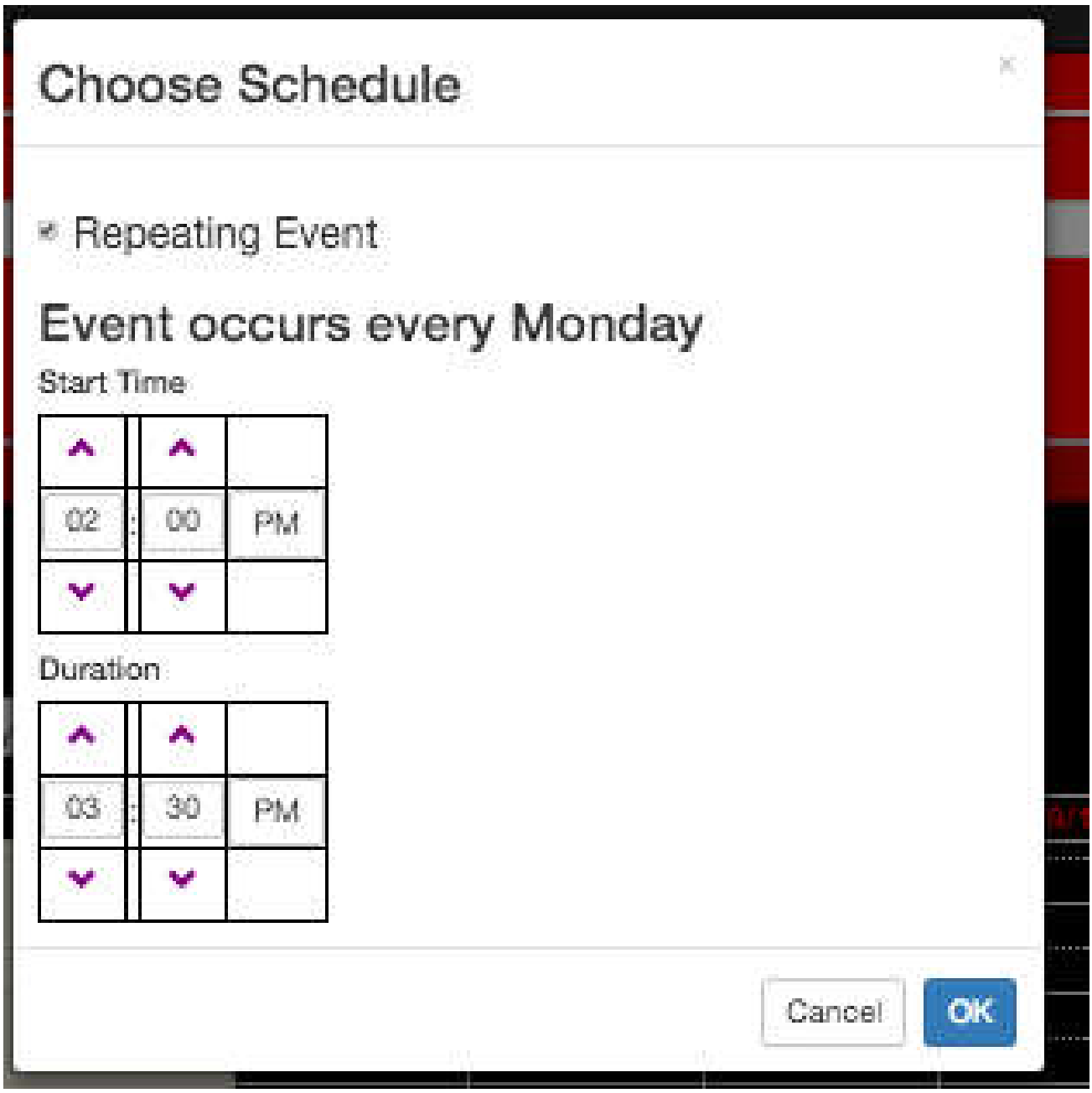
Shows Map centered on User's current location or Times Square if location is unavailable. Allows user to specify address of the Shareable.

~~04.02.06(a) CreateShareable Schedule (1)~~



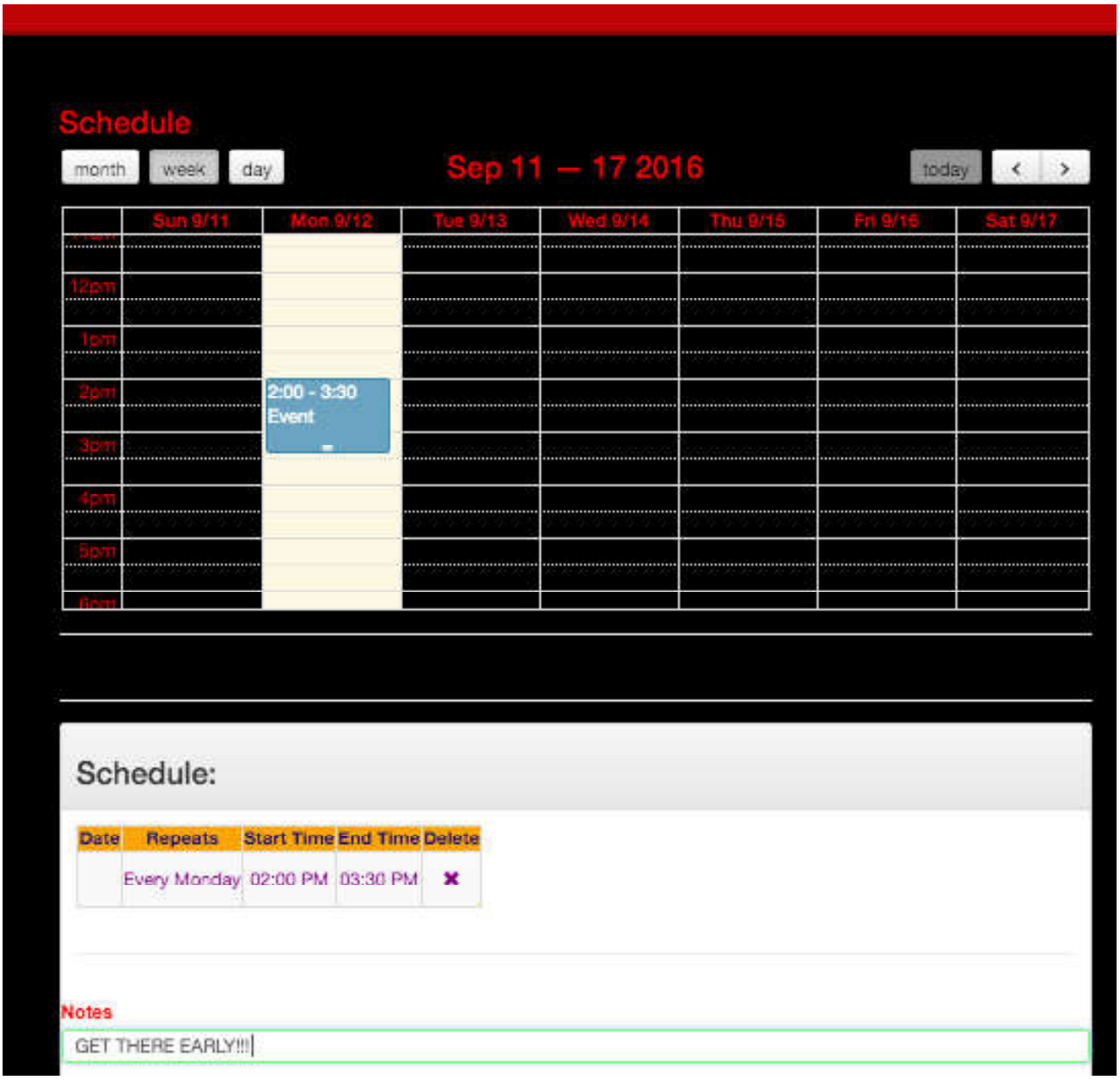
~~Shows blank calendar. When Guttersnipe clicks on a date, it will be shown popup in next Figure.~~

04.02.06(a) CreateShareable: Schedule (1)



Shows blank calendar. When Guttersnipe clicks on a date, it will be shown popup in next Figure.

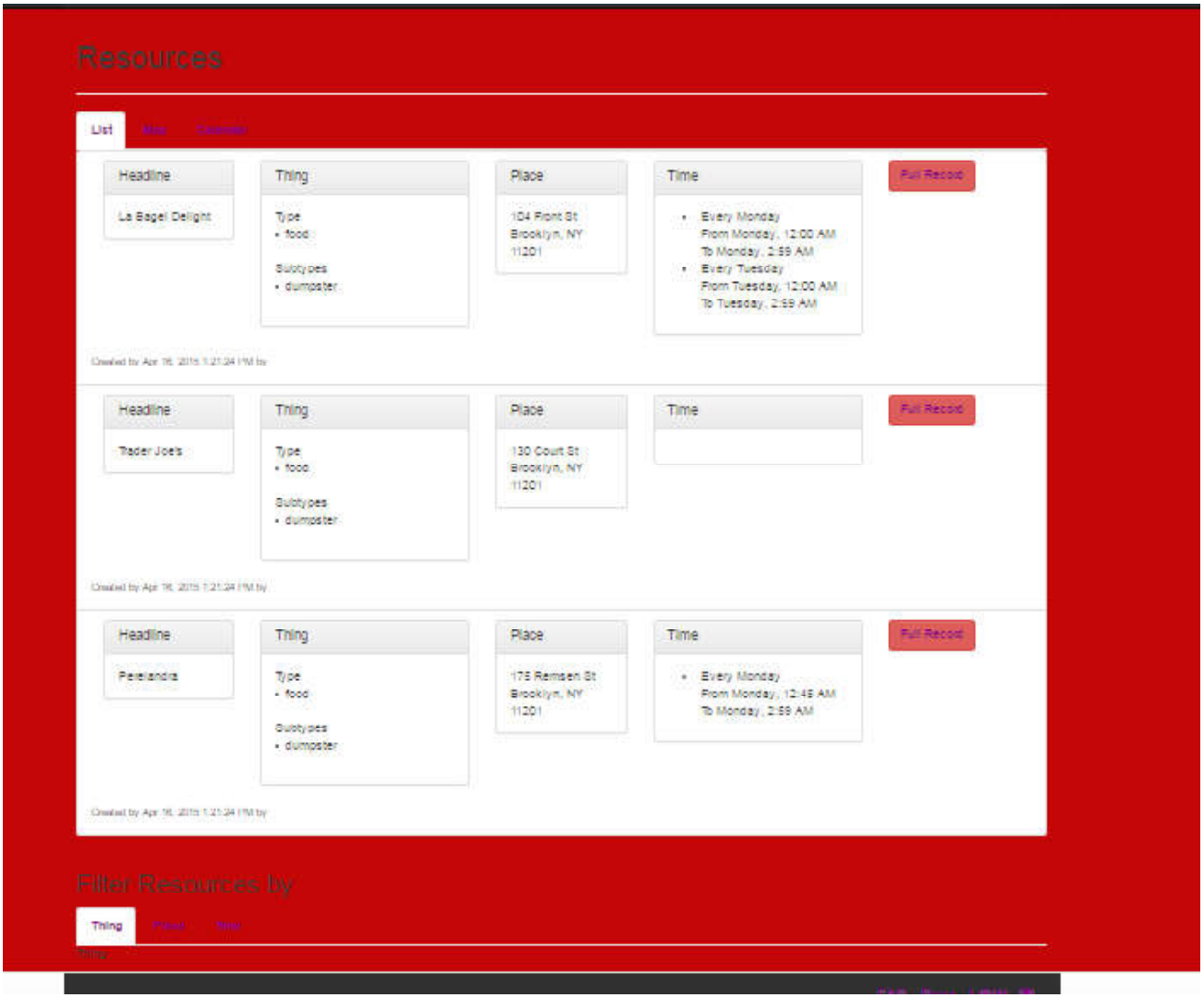
04.02.06(c) CreateShareable Schedule (3)



A calendar is shown once the user has selected a new schedule for the event.
A list of schedules is show under the calendar.
The user can delete any schedules which are incorrect.

04.03. SearchShareable

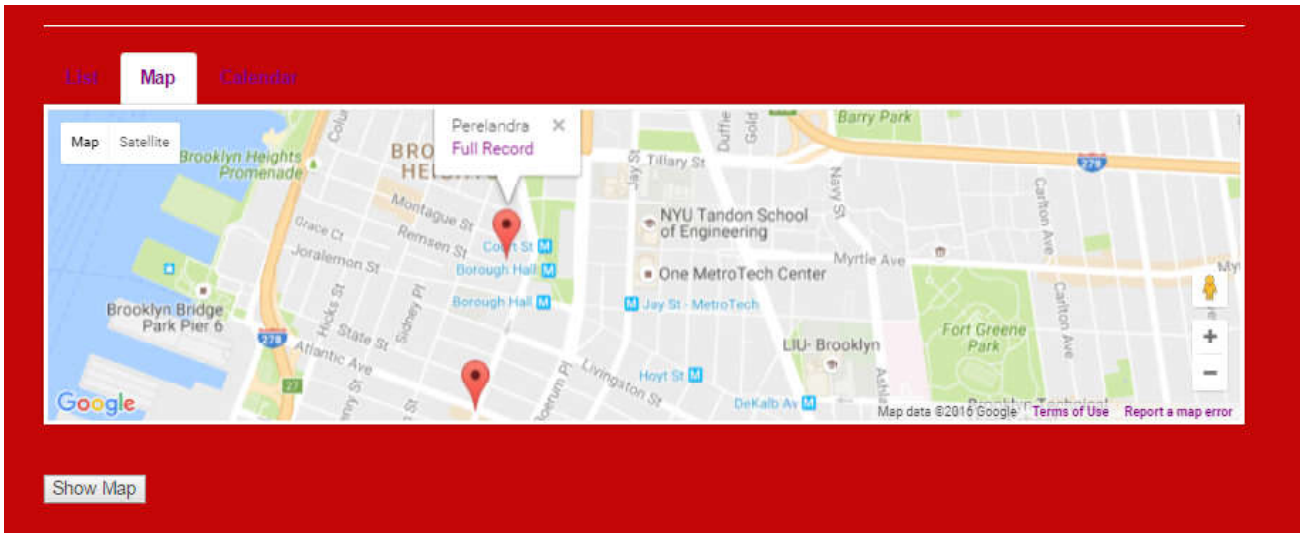
04.03.01 SearchShareable Results List



Shows the results of the Shareable Search as a list.
Columns for

- Headline
- Thing (Type && Subtype)
- Place
- Times
- Link to Full Record

04.03.02 SearchShareable Results Map



Shows Shareable Search Results as a Map.
Each point on the map has a tooltip that opens up a window with a Summary and a link to the Shareable.

04.03.03 SearchShareable Results Calendar

Shows Shareable Search results as a Calendar.
Each entry on the calendar a link that can be clicked for the full record.

04.03.03 SearchShareable Search Filters

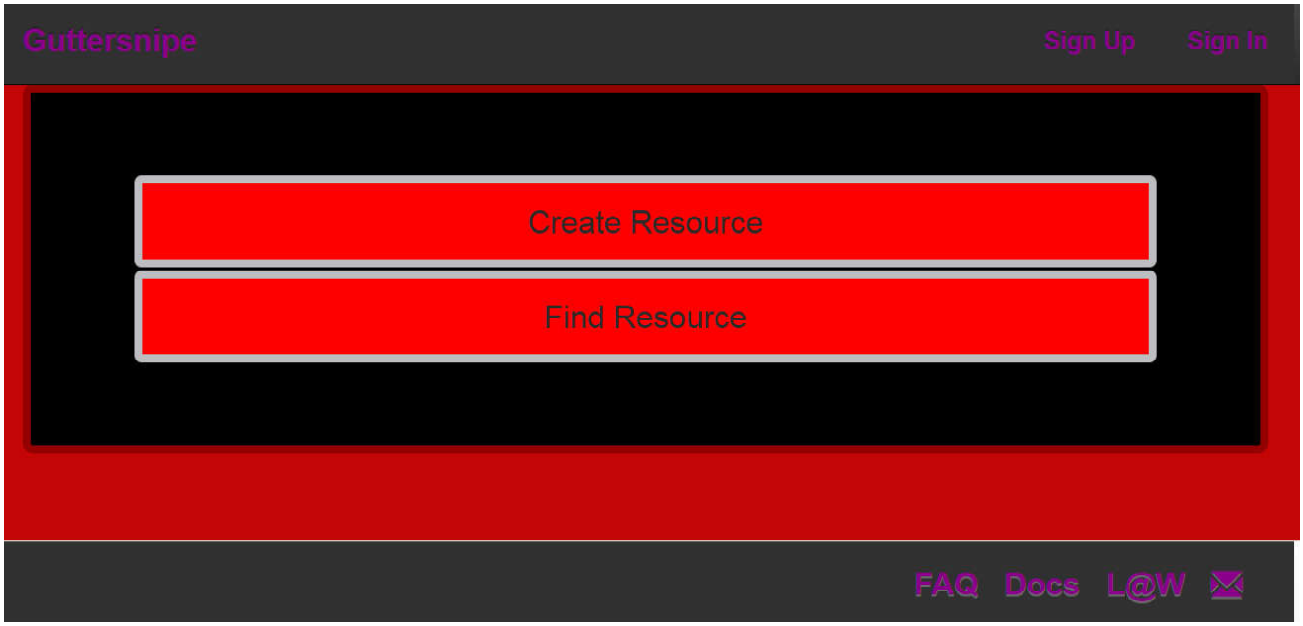
Search Interface will have 3 filters. These have not been designed yet

- Thing
    - By Type and Subtype
    - By Tags
- Time
    - By Date/Time
- Space
    - Choose Map Location

User will be able to refine these 3 search filters and submit a search query when done.

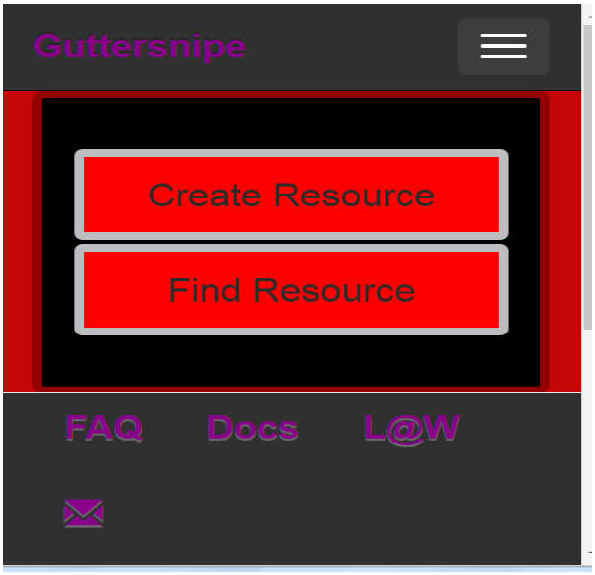
04.03. Account Management

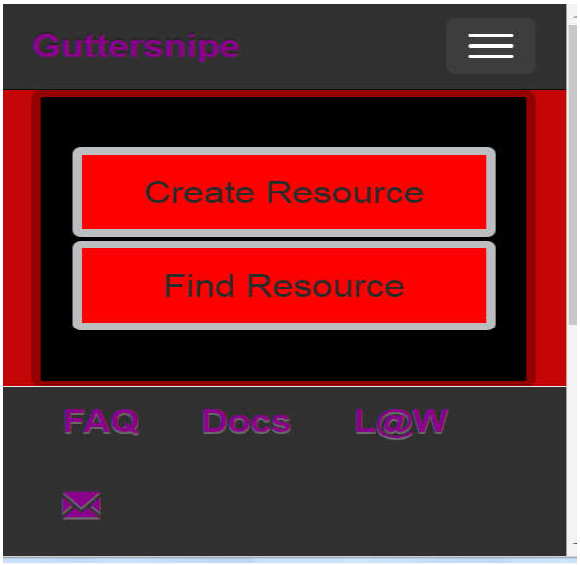
04.04.01
Account Management
Sign In and Sign Up Buttons



In the top right corner of the menu bar are buttons for “Sign Up” and “Sign In”

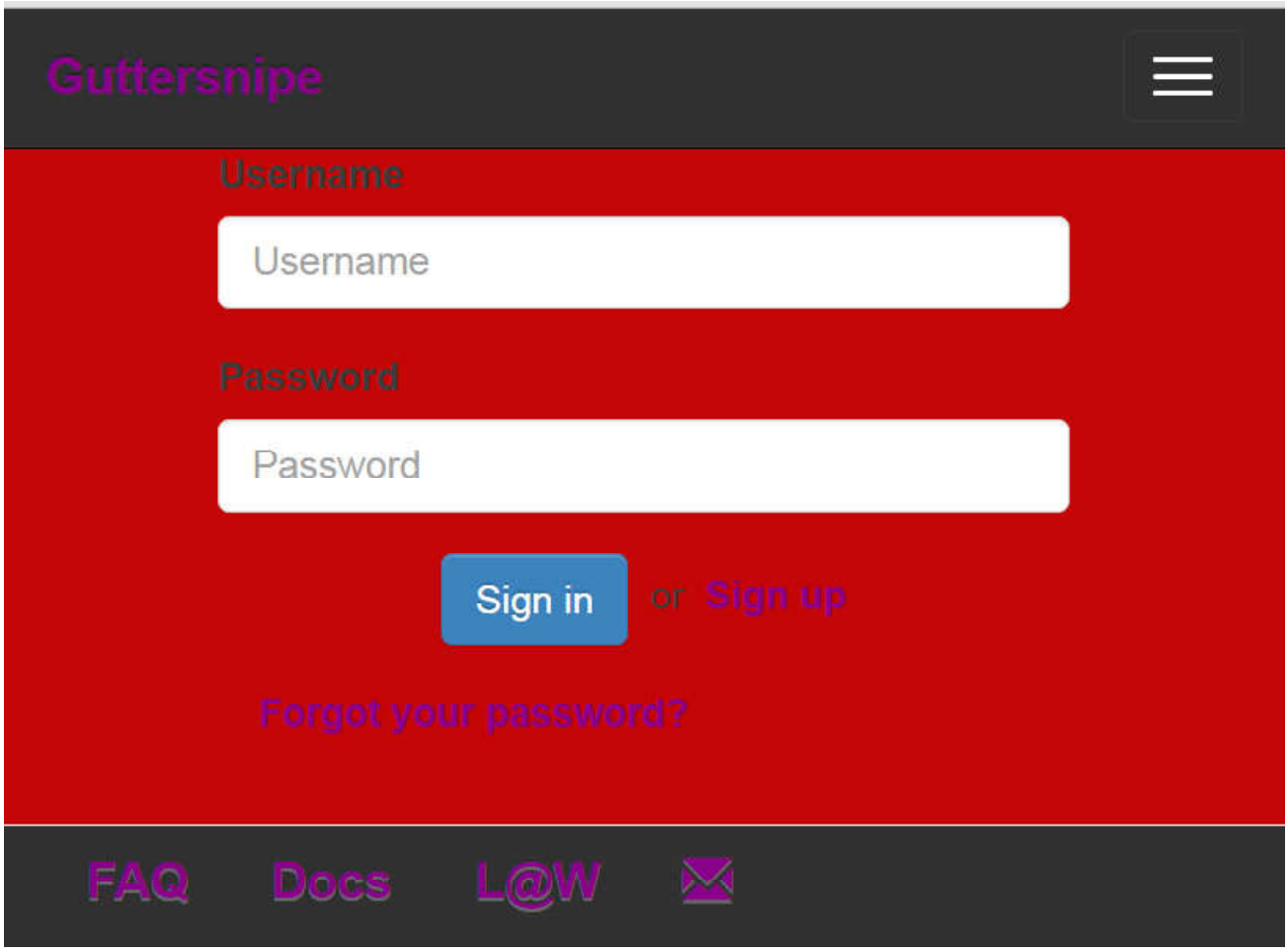
04.04.02
Account Management
Smaller Screens





On Smaller Screens, users can click on the top right burger-shaped menu button to display the Sign Up and Sign In buttons

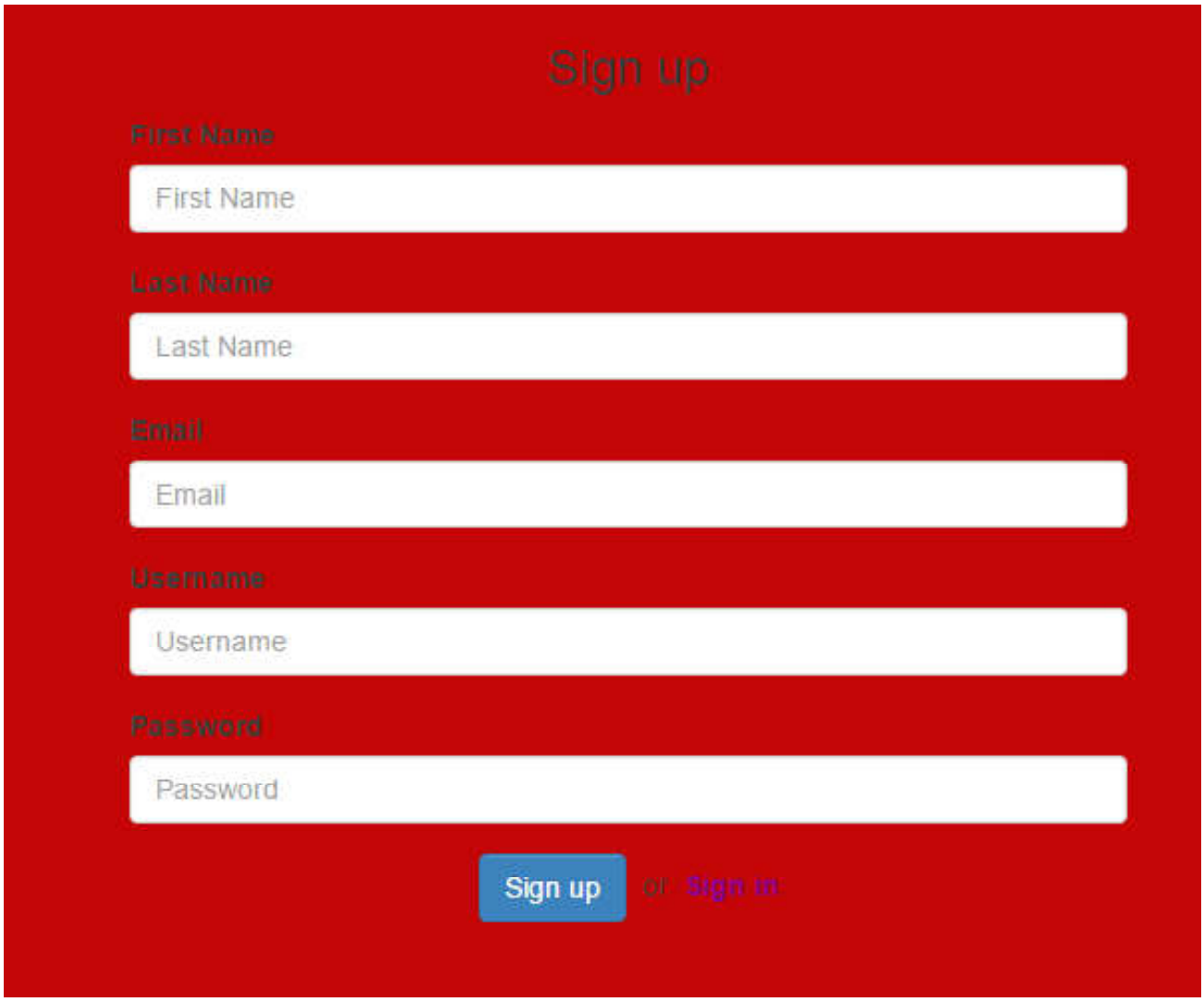
04.04.05
Account Management
Sign In



Shows form

- User
- Password
- Sign In Button

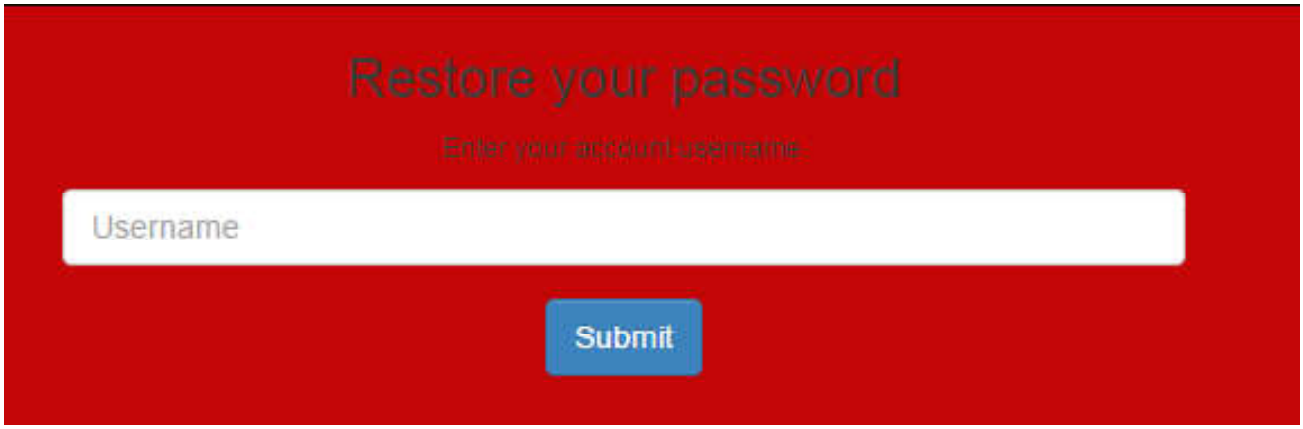
04.04.04
Account Management
Sign Up



Signup Page asks user to fill in form:

- Username:
- Expiration Date
- Email (optional)
- Password (optional)

04.04.05
Account Management
Restore Password

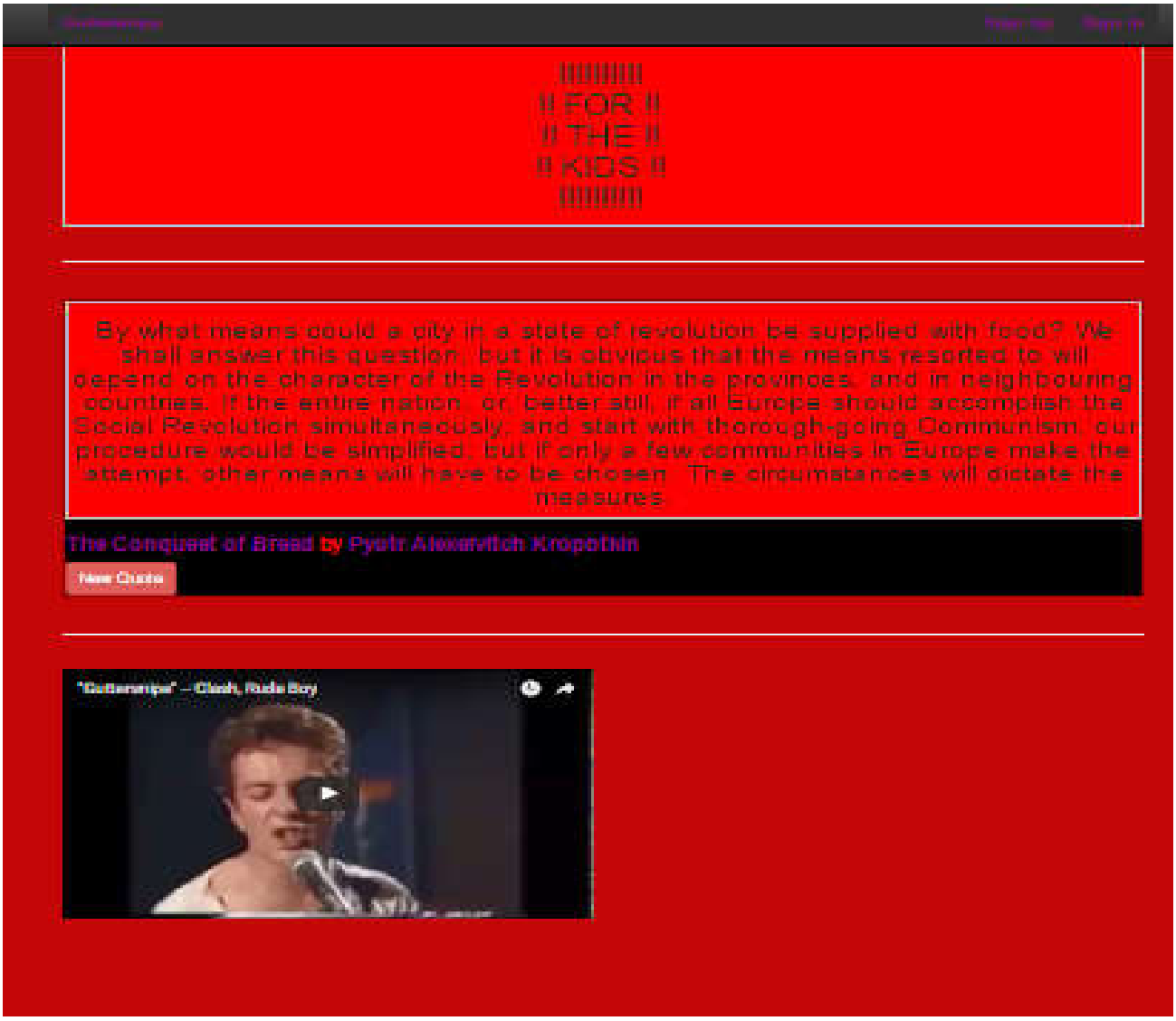


Provides a button for asking system to send user a password reset form.

Documentation

DOCUMENTATION: GENERAL

04.05.01
Documentation: General Mission Page



Mission page shows

- "FOR THE KIDS!!!
- Kropotkin Quotes Widget
- Joe Strummer "guttersnipe" video.

04.05.02
Documentation: General
FAQ Page

Displays a FAQ about the project.
This is same content as section “01_01: Proposal” of the current document.

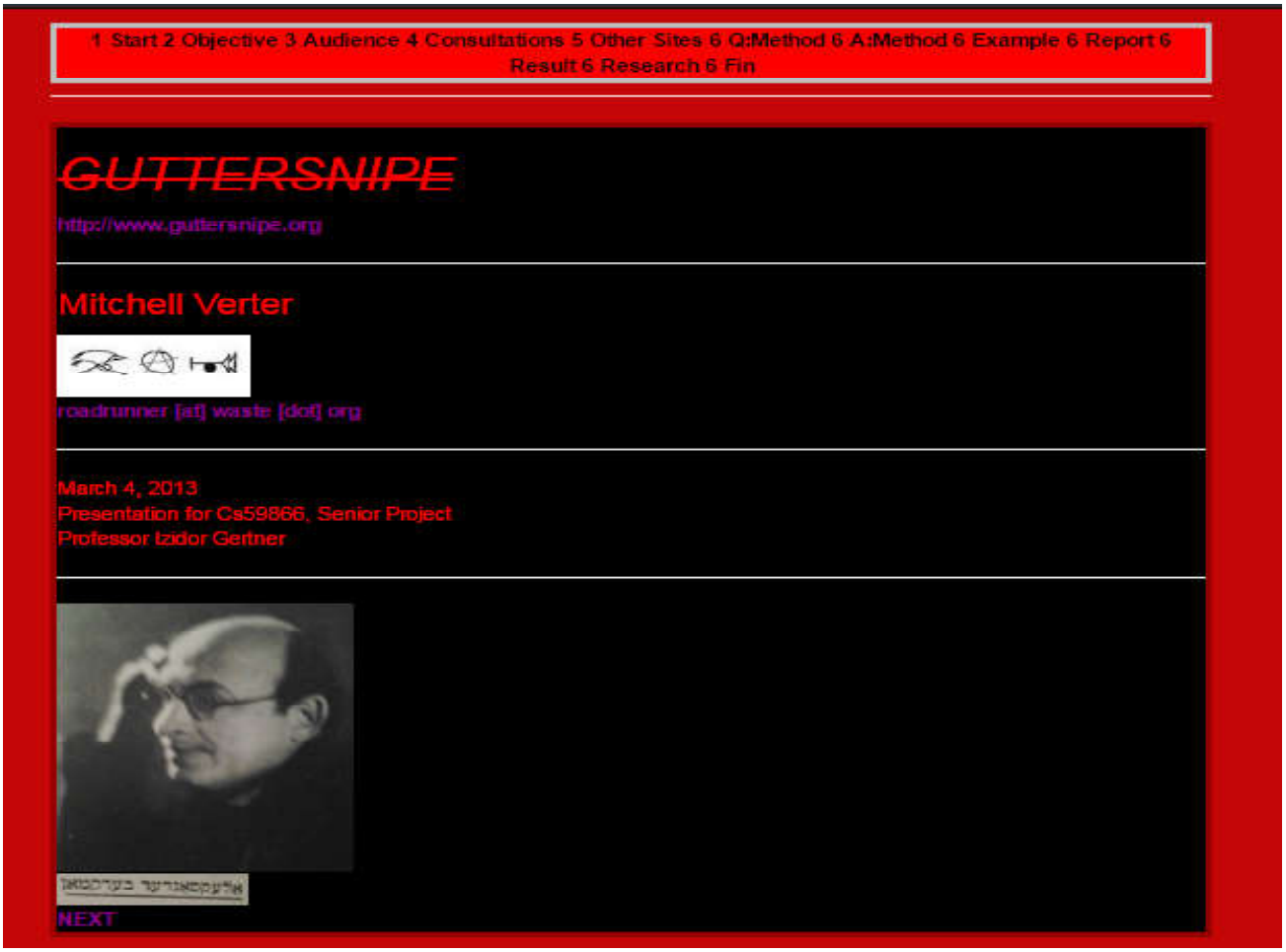
DOCUMENTATION:
2013 Presentation

~~04.05.03.01~~
~~Documentation: 2013 Presentation~~
~~Start Page~~

~~From 2013 Presentation:~~
~~Section 6:~~
~~START PAGE~~

~~The following slides are taken from my 2013 presentation prepared for what I intended to be my senior project at City College of New York~~

04.05.03.02
Documentation: 2013 Presentation Front Page



From 2013 Presentation:
Section 6:
FRONT PAGE
==========

GUTTERSNIPE
http://www.guttersnipe.org
Mitchell Verter

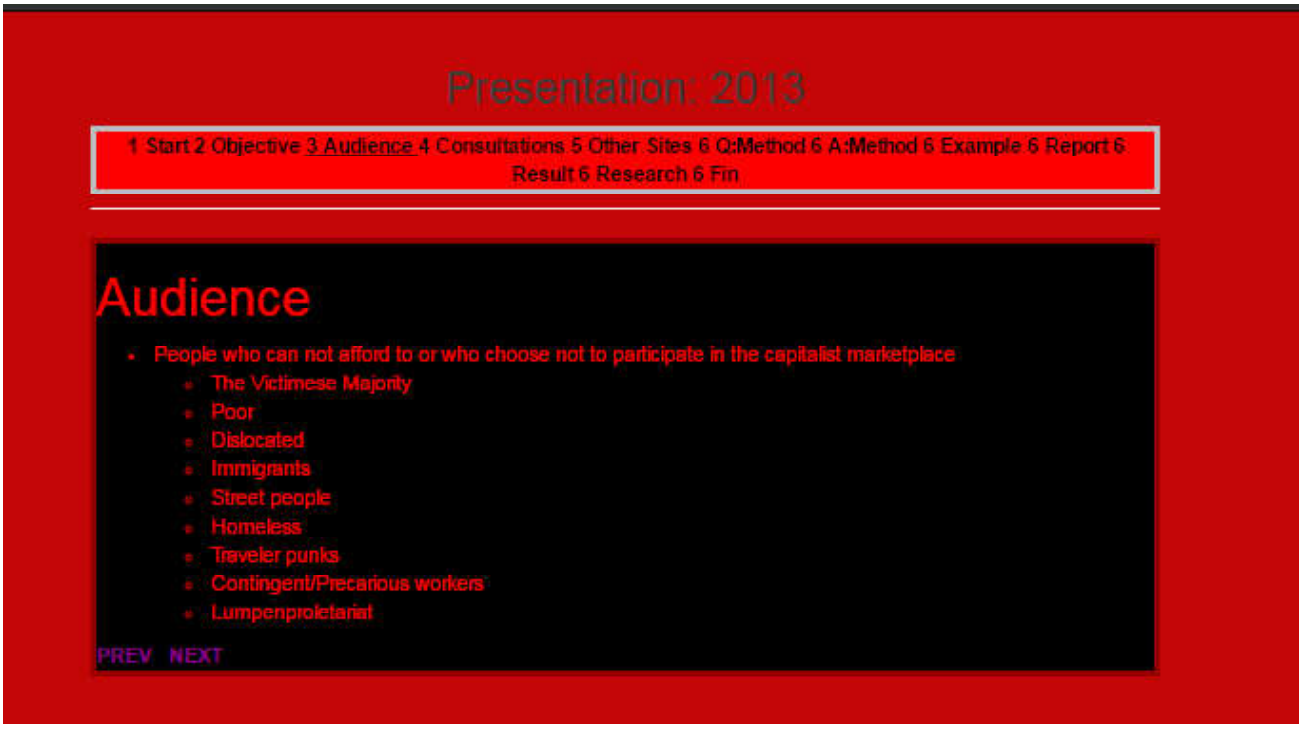
roadrunner [at] waste [dot] org
March 4, 2013
Presentation for Cs59866, Senior Project
Professor Izidor Gertner
<Picture of Alexander Berkman>

04.05.03.03 Documentation: 2013 Presentation Objective

From 2013 Presentation:
Section 6:
OBJECTIVE
=========

- To overthrow capitalism by helping to establish mediums of exchange outside of the capitalist marketplace.
- "Over a billion human beings live in absolute poverty, suffering from chronic malnutrition and other ills, while we have much more than an adequate material basis for a good life for all." – John Clark,The Impossible Community Realizing Communitarian Anarchism

04.05.03.04
Documentation: 2013 Presentation Audience



From 2013 Presentation:
Section 6:

AUDIENCE
========
People who can not afford to or who choose not to participate in the capitalist marketplace

- The Victimese Majority
- Poor
- Dislocated
- Immigrants
- Street people
- Homeless
- Traveler punks
- Contingent/Precarious workers
- Lumpenproletariat

04.05.03.05
Documentation: 2013 Presentation Consulting Organizations

From 2013 Presentation:
Section 6:
CONSULTING ORGANIZATIONS
==========

Consulting Organizations

- **Freegan NYC:**
  - Freegans are people who employ alternative strategies for living based on limited participation in the conventional economy and minimal consumption of resources.
  - Dumpster Dive Directory
- **Picture the Homeless**
  - A grassroots organization founded and led by homeless people.
  - Extensive list of vacant properties

04.05.03.06
Documentation: 2013 Presentation
Other Sites

From 2013 Presentation:
Section 6:
OTHER SITES
==========

Other Web Sites

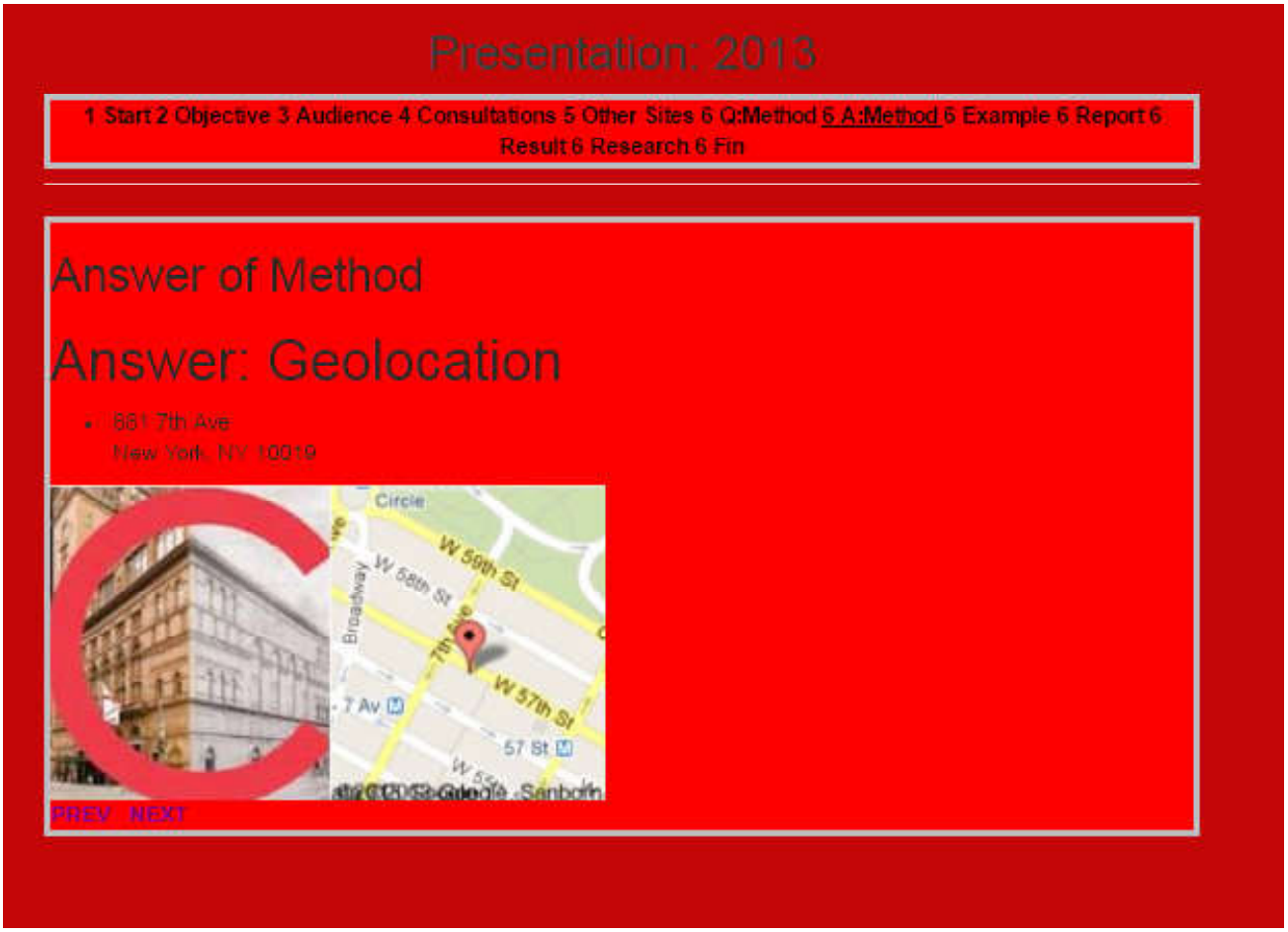
- Other Websites
    - Squat.net
    - Foodsharing (Germany)

04.05.03.07
Documentation: 2013 Presentation
Question of Method

From 2013 Presentation:
Section 6:
QUESTION OF METHOD
==========

Question of Method
. How do you get to Camegie Hall?

04.05.03.08
Documentation: 2013 Presentation
Answer of Method



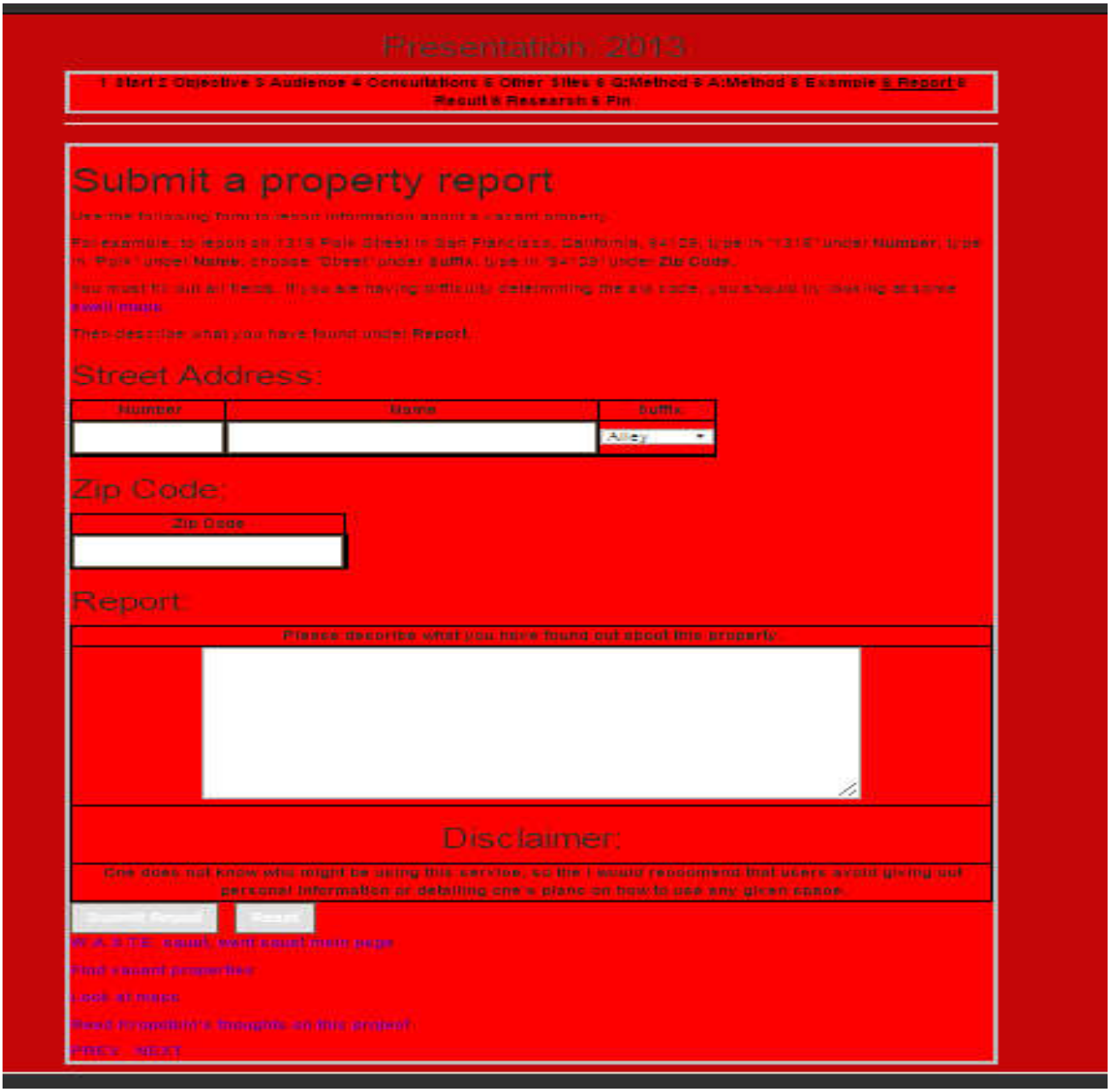
From 2013 Presentation:
Section 6:
ANSWER OF METHOD
==========

Answer: Geolocation
881 7th Ave
New York. NY 10019

04.05.03.09
Documentation: 2013 Presentation Example (2002)

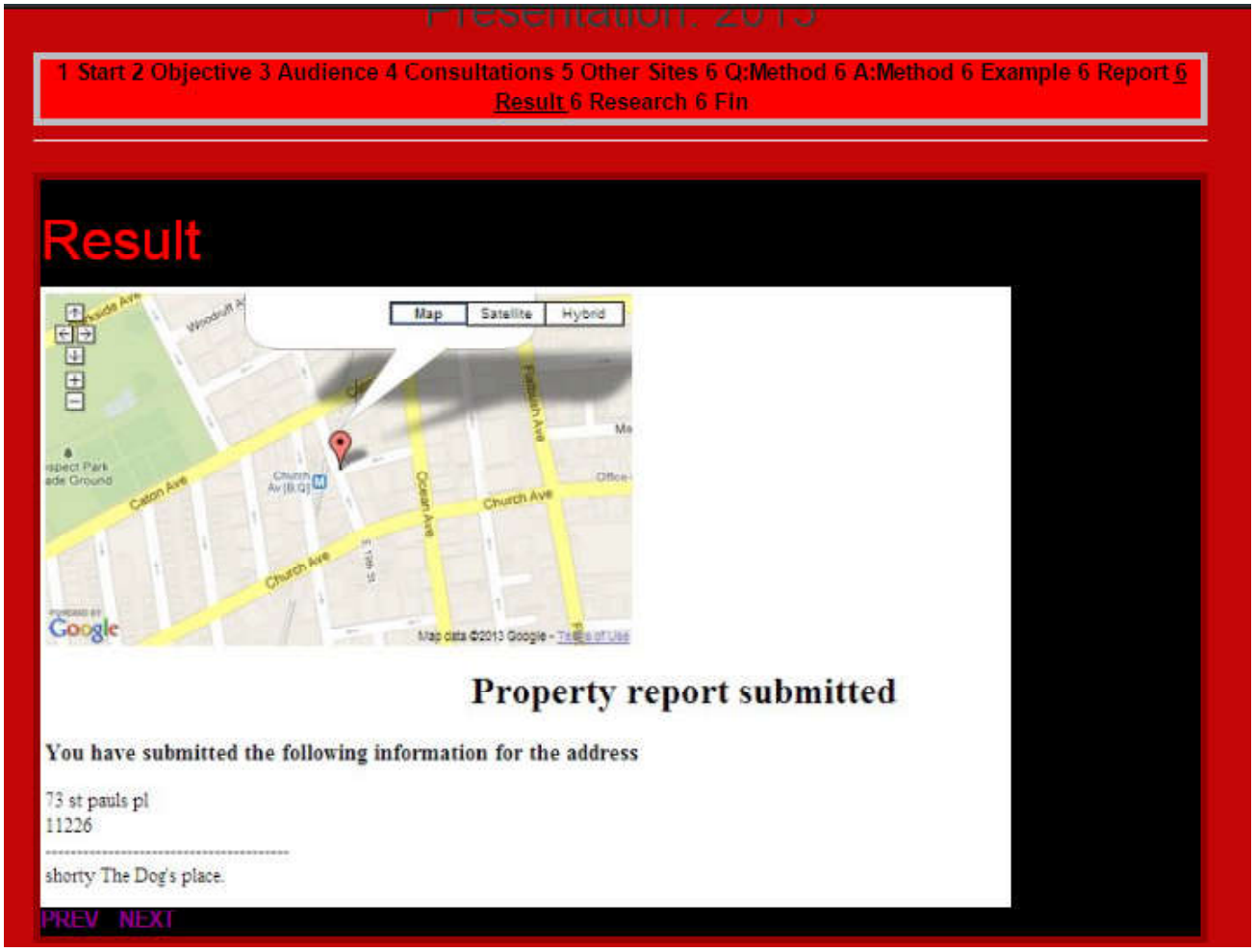
The following pages are taken from a previous incarnation of this project. Designed in 2002, these pages are still available at: https://www.waste.org/~roadrunner/squat/

04.05.03.12
Documentation: 2013 Presentation
Submit Property Report GUI (2002)



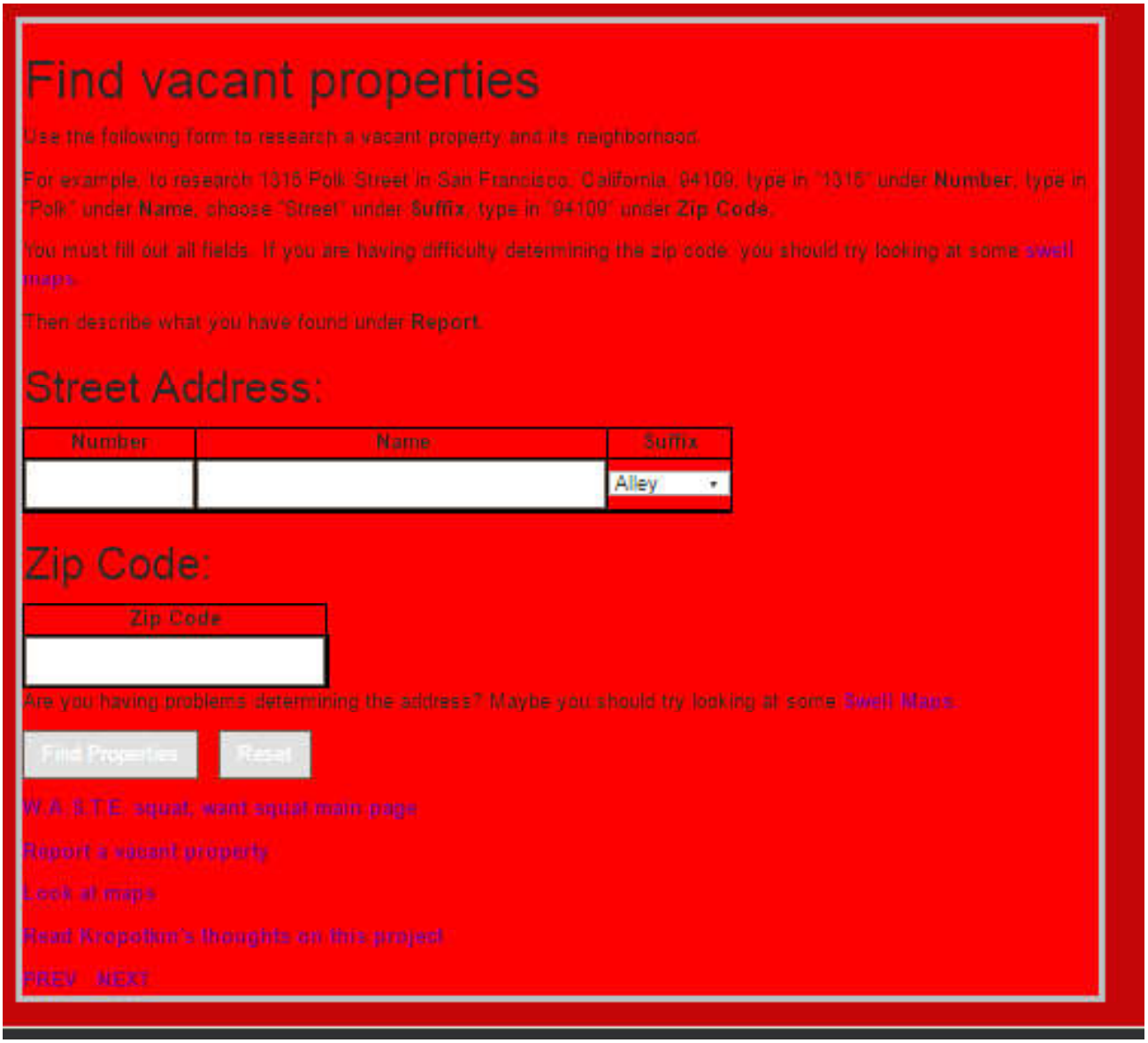
Shows the Submit Property Report interface from the 2002 deployment.

04.05.03.11
Documentation: 2013 Presentation
Property Submission Response (2002)



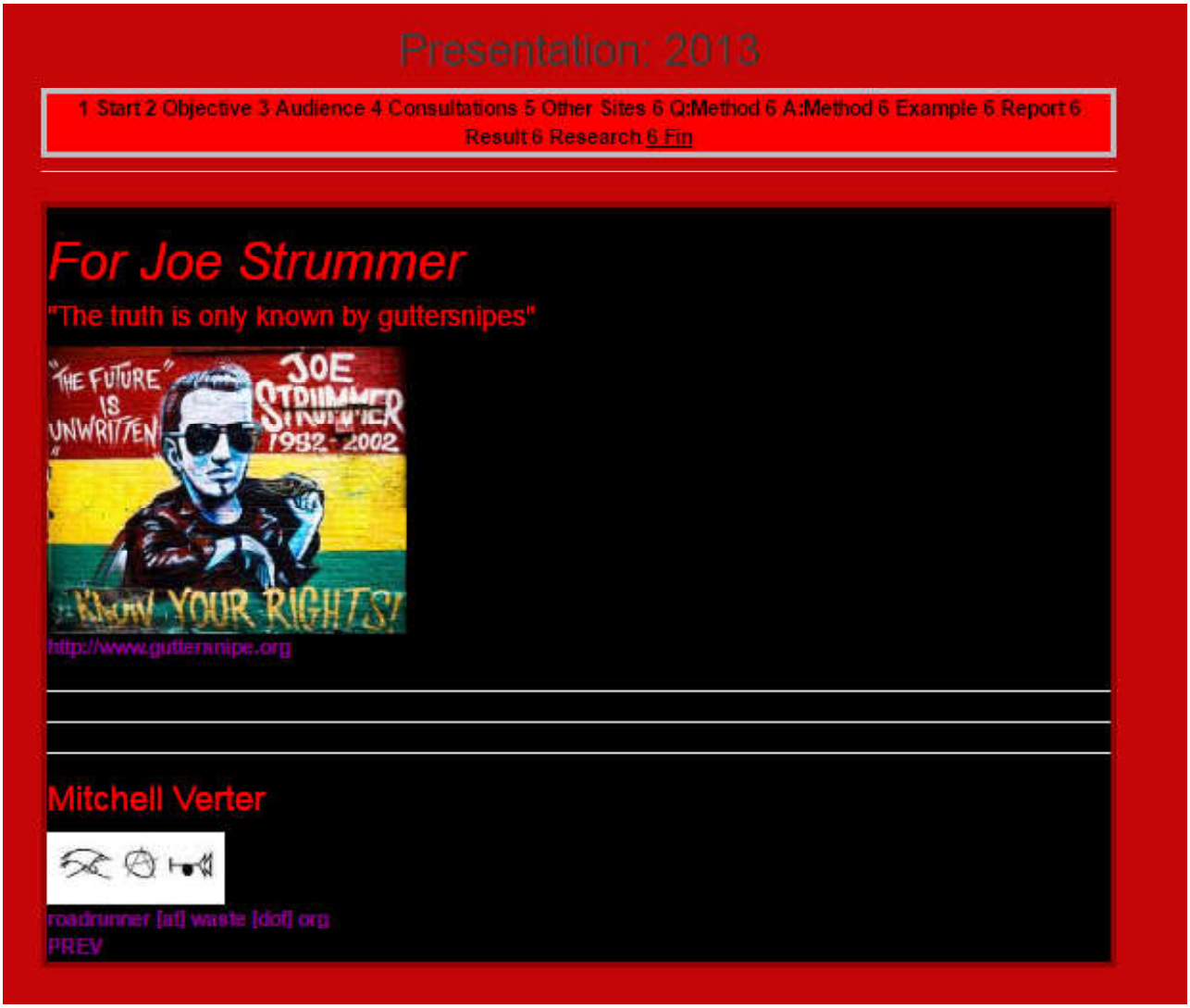
Shows a Resulting page for a Property Submission from the 2002 deployment.

04.05.03.12
Documentation: 2013 Presentation
Property Search (2002)



Shows the Property Search GUI from the 2002 deployment.

04.05.03.13
Documentation: 2013 Presentation
FIN



Final Page from 2013 Presentation:

For Joe Strummer
"The truth is only known by guttersnipes"

http://www.guttersnipe.org
Mitchell Verter
roadrunner [at] waste [dot] org

DOCUMENTATION: ADMINISTRATIVE INFORMATION PAGES

04.05.01 Documentation: Administrative L@W Page

Shows Legal Information
==========

You are free to use Guttersnipe as you wish.

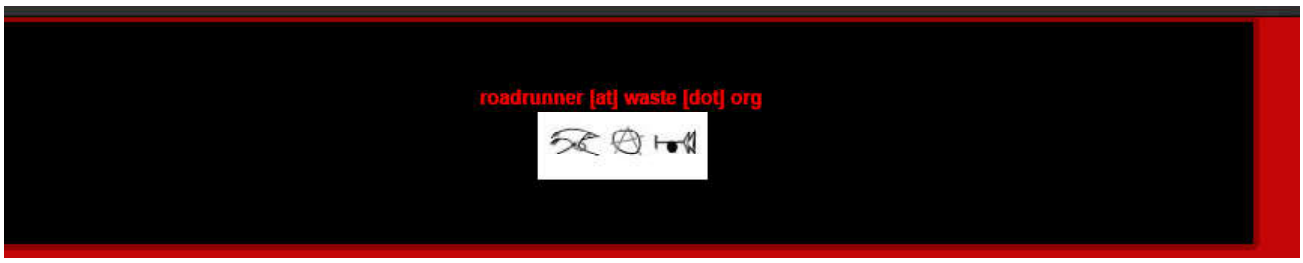
All Wrongs Righted
All Rites Reversed

GNU General Public License

04.05.04.02 Documentation: Administrative Credits Page

Shows creator and inspirations for the project.

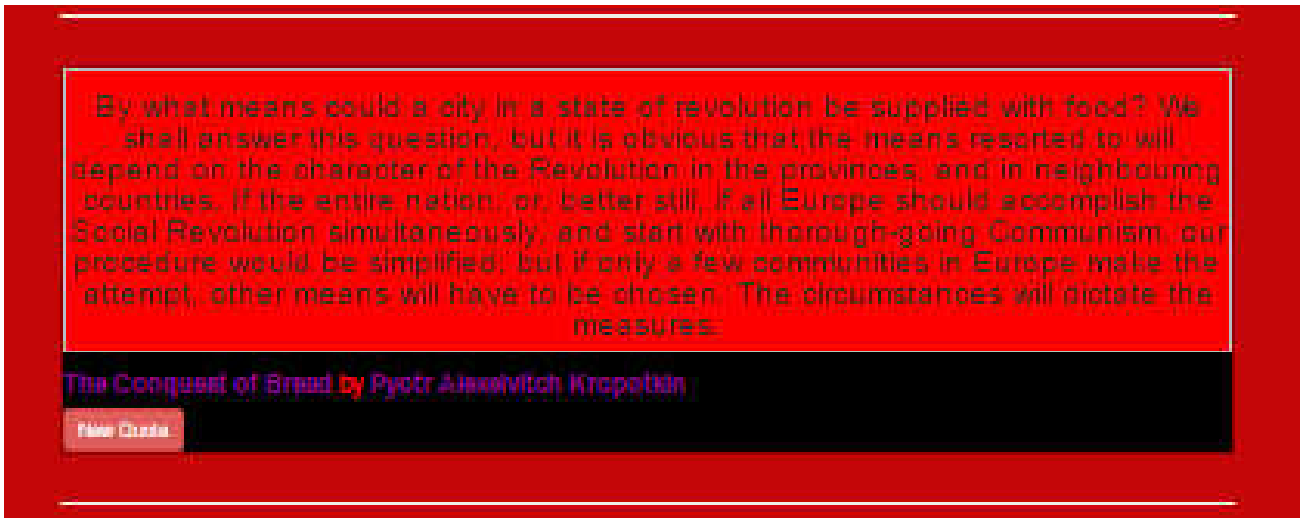
04.05.04.03 Documentation: Administrative Contact Information



Displays email address and a clickable picture to send mail.

Kropotkin Quote Widget

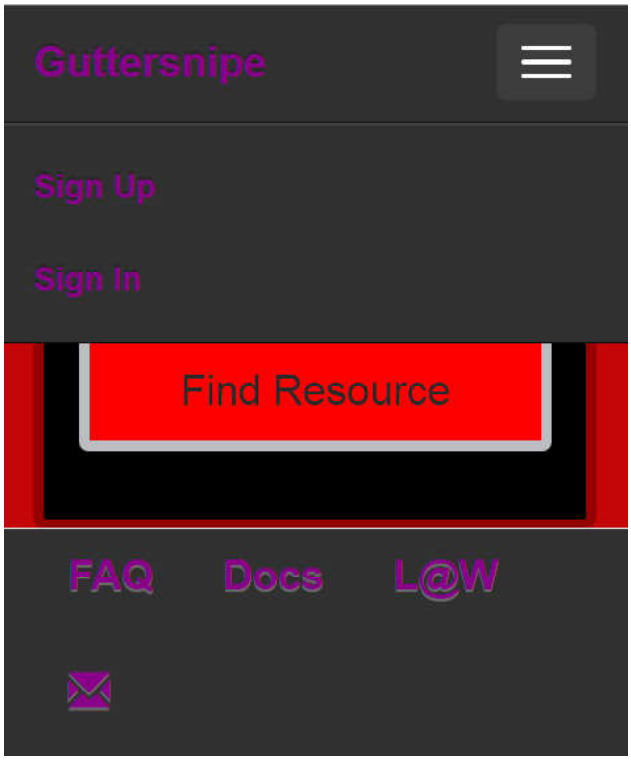
04.06.01
Kropotkin Quote



The Kropotkin widget displays quotes from “Conquest of Bread”
The “New Quote” button produces another randomly-chosen quote.
We intend to add another button that cycles through quotes every minute.

RESPONSIVE WEB DESIGN

04.04.07
Menu Dropdown

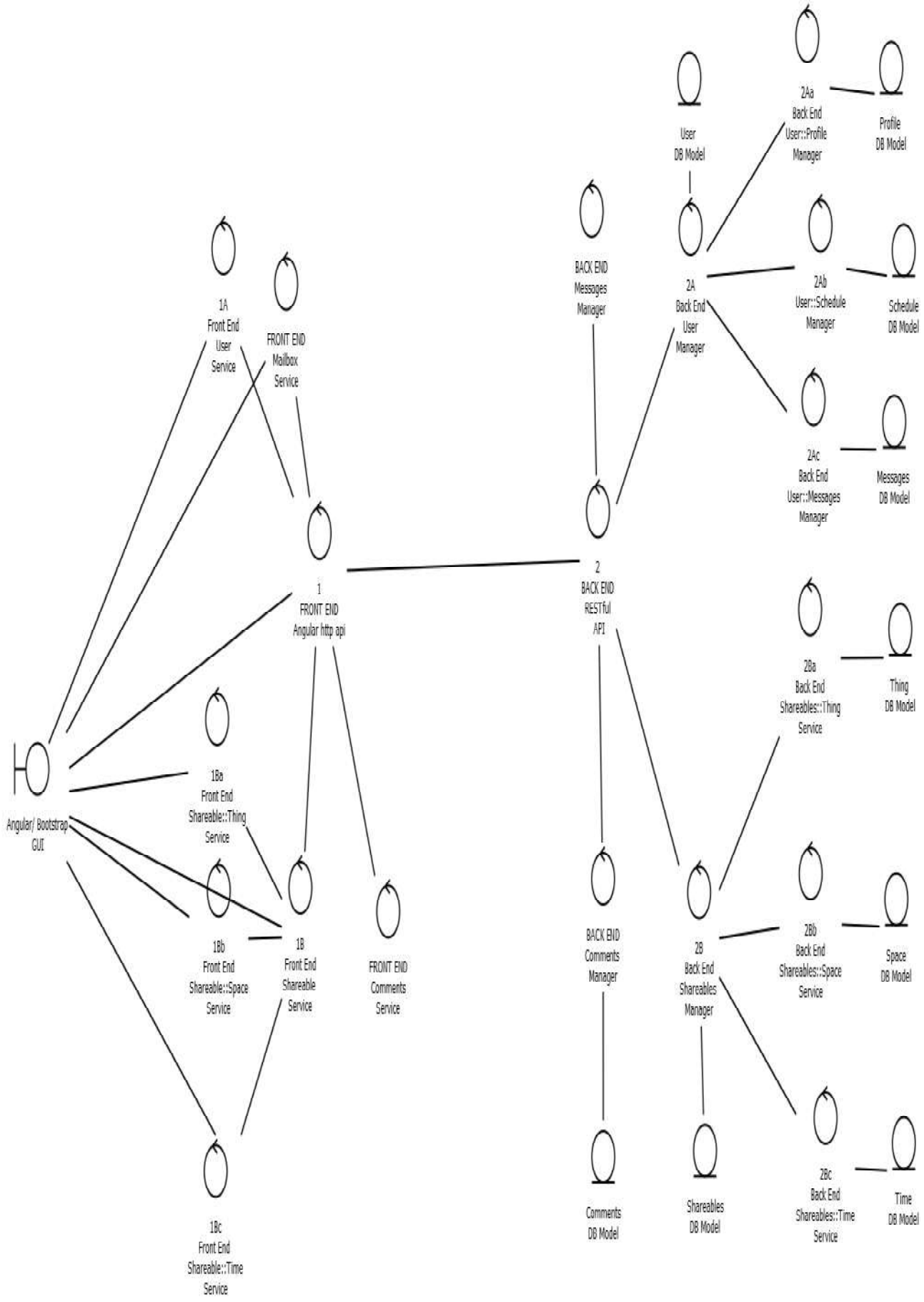


On smaller screens, the top toolbar is replaced with a button which displays a dropdown menu which reveals, when pressed, buttons for Sign In and Sign Up

Collaboration Diagrams

Collaboration Diagram Stereotypes

Part 1: Control Objects
Part 2: GUI Bound-


Angular/ Bootstrap GUI
1A Front End User Service
FRONT END Mailbox Service
1Ba Front End Shareable::Thing Service
1Bb Front End Shareable::Space Service
1Bc Front End Shareable::Time Service
1B Front End Shareable Service
FRONT END Comments Service
1 FRONT END Angular http api
BACK END Messages Manager
2 BACK END RESTful API
BACK END Comments Manager
Comments DB Model
User DB Model
2A Back End User Manager
2B Back End Shareables Manager
Shareables DB Model
2Aa Back End User::Profile Manager
Profile DB Model
2Ab User::Schedule Manager
Schedule DB Model
2Ac Back End User::Messages Manager
Messages DB Model
2Ba Back End Shareables::Thing Service
Thing DB Model
2Bb Back End Shareables::Space Service
Space DB Model
2Bc Back End Shareables::Time Service
Time DB Model

System Collaboration Diagram

FRONT END

Boundary Classes :

The User interacts with the application through a Browser Interface.
The pages below can be reached directly through the value entered in

- Browser Address Bar (GUI)
- Angular Components (GUI)

Control Classes:

The Front End is written in Angular/Ionic.
This allows us to impose a layer of control on the front end.

1. API/HTTP Service
    a. User Services
        i. Mailbox Service
        ii. Schedule Service
        iii. Profile Service
    b. Shareables Service
        i. Thing Service
        ii. Space Service
        iii. Time Service
        iv. Comments Service
        v. Ratings Service

BACK END

The Back End is written in Python/Flask/SQLAlchemy.
It offers a Back End layer of Control Classes and a layer of Entity Classes.

Control Classes:

c. Flask
    i. RESTful API

Entity Classes

d. /SQLAlchemy Models
    i. User Models
        1. Mailbox Model
        2. Schedule Model
        3. Profile Model
    ii. Shareables Model
        1. Thing Model
        2. Space Model
        3. Time Model
        4. Comments Model
        5. Ratings Model

Control Objects

1. **FRONT END:** Angular HTTP API

An API Service wraps the native Angular $http Service

a. F/E User Service

A User Service maintains the User's account.
The User can login and logout through this
It can be used together with the Messages and the Comments Services

b. F/E Shareables Service

A Shareables Service maintains the array of Shareables and functions for each Shareable.
Shareables Service maintains CRUD functionality for the list of Shareables and for each individual Shareable.

i. F/E Shareables::Thing Service

The Thing Service maintains Tags, Type/Subtype, and Description data

ii. F/E Shareables::Space Service

The Space Service maintains geolocation data.

iii. F/E Shareables::Time Service

The Time Service maintains schedule data

c. Comments Service

The Comments Service maintains the comments that Guttersnipes put on Shareables.
CRUD functionality is available for the array and each member.

i. Messages Service

A Shareables Service maintains the array of Messages that Guttersnipes send to each other as well as each individual Message.
CRUD functionality is available for the array and each member

2. Back END: RESTful API

API written with Flask/SQLalchemy

a. B/E User Model

A User Model maintains the User's account.
The User can login and logout through this
It can be used together with the Messages and the Comments Models

b. B/E Shareables Model

A Shareables Model maintains the array of Shareables and functions for each Shareable.
Shareables Model maintains CRUD functionality for the list of Shareables and for each individual Shareable.

i. B/E Shareables::Thing Model

The Thing Model maintains Tags, Type/Subtype, and Description data

ii. B/E Shareables::Space Model

The Space Model maintains geolocation data.

iii. B/E Shareables::Time Model

The Time Model maintains schedule data

c. Comments Model

The Comments Model maintains the comments that Guttersnipes put on Shareables.
CRUD functionality is available for the array and each member.

d. Messages Model

A Shareables Model maintains the array of Messages that Guttersnipes send to each other as well as each individual Message.
CRUD functionality is available for the array and each member

DB Model Objects

DB Models (SQLalchemy/PostGIS

API written with Flask/SQLalchemy
Database uses postgresql with PostGIS

a. B/E User DB Model

Stores

i. id
ii. profile
iii. schedule
iv. is_admin
v. created_on

b. B/E Profile DB Model

Stores

i. id
ii. username
iii. email
iv. full_name
v. password
vi. additional_info

c. B/E Schedule DB Model

Stores

i. id
ii. calendar = sCalendar_VEVENT
iii. notes

d. Messages DB Model

Stores

i. calendar = sCalendar_VEVENT
ii. text
iii. sender
iv. recipient
v. sent = db.Column(db.DateTime

e. Block User Join DB Table

Stores

i. blocker
ii. blocked

f. B/E Shareables DB Model

i. id
ii. thing_id
iii. space_id
iv. time_id
v. comments
vi. number_ratings
vii. total_ratings

g. B/E Shareables::Thing DB Model

The Thing DB Model maintains Tags

i. subtypes = String [] *# Not a good choice. Rethink this*
ii. descriptionHow
iii. descriptionWhat

h. B/E Tag DB Model

i. id
ii. tag

i. Tag Thing DB Join

i. tag_id
ii. shareable_id

j. B/E Shareables::Space DB Model

i. The Space DB Model maintains geolocation data.
ii. id
iii. longditude
iv. latitude
v. canonical_address
vi. alternate_names
vii. notes

k. B/E Shareables::Time DB Model

i. The Time DB Model maintains schedule data
ii. id
iii. calendar = sCalendar_VEVENT
#sCalendar_VEVENT will be defined soon ...
iv. notes

l. Comments DB Model

The Comments DB Model maintains the comments that Guttersnipes put on Shareables.

CRUD functionality is available for the array and each member.

i. id
ii. author
iii. shareable
iv. text
v. created

Boundary Objects

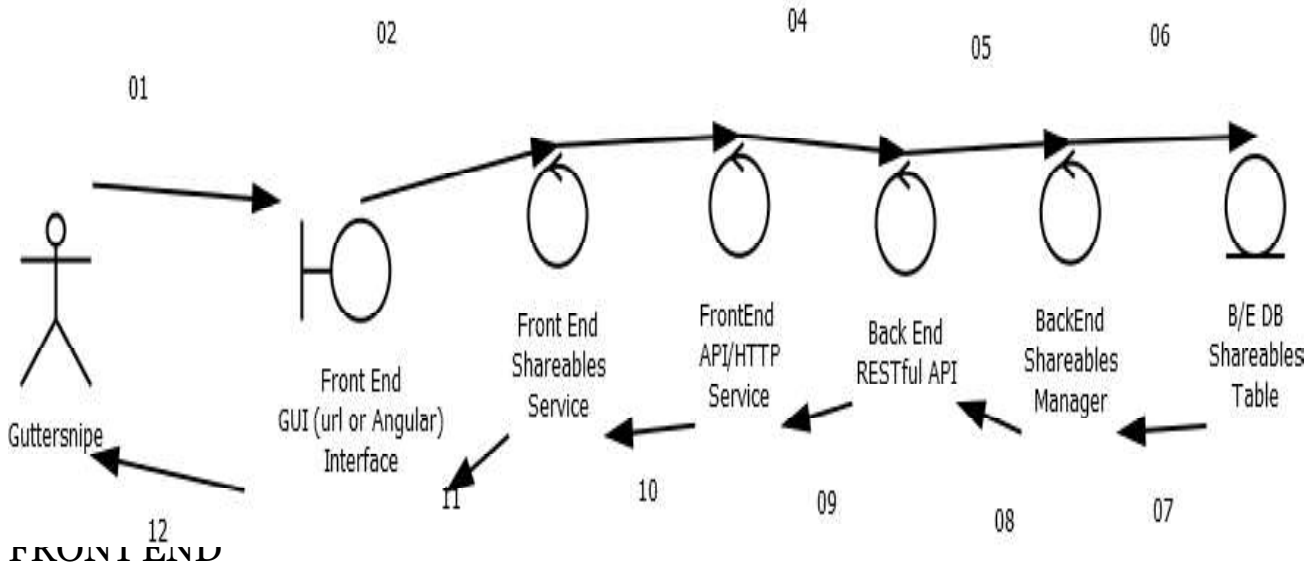
1. Angular GUI (Angular/Ionic/Bootstrap)

GUIs written with Angular/Ionic JS Frameworks.
CSS with Bootstrap

a. B/E User Entity

A User Entity maintains the User's account.
The User can login and logout through this
It can be used together with the Messages and the Comments Entitys

03.01.01.01
View Shareable



FRONT END

1. User Interacts With GUI via Angular Components or Browser Address
2. GUI sends message to Angular Service
3. Angular Service sends message to Angular $httpAPI Service

CLIENT-SERVER

4. Front End $httpAPI service sends message to RESTful API Back End

BACK END

5. API sends message to Object Manager
6. Manager sends request to Database
7. Database returns object data to Object Manager
8. Object Manager returns formatted objects to RESTful API

SERVER CLIENT

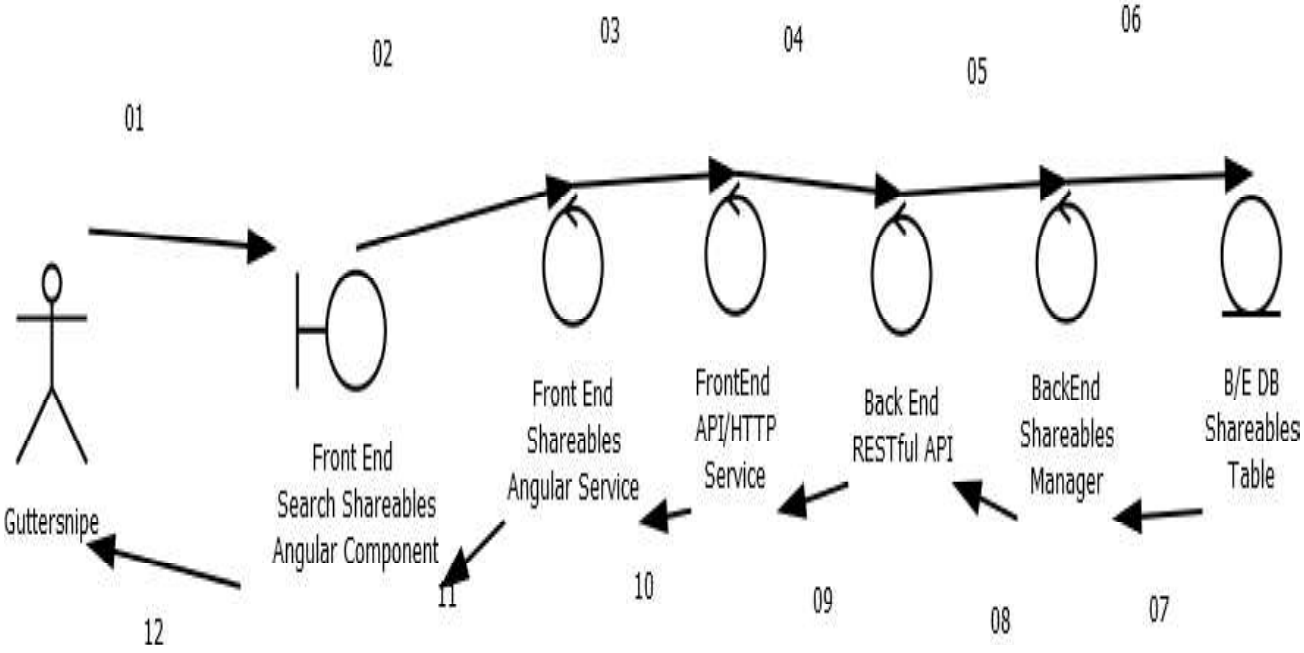
9. RESTful API returns json data to Angular API Service

FRONT END

10. $httpAPI returns data to Angular Service
11. Angular Service changes Angular Component GUI

03.01.01.02
Search Shareable

FRONT END



1. User Interacts With GUI via Angular Components or Browser Address
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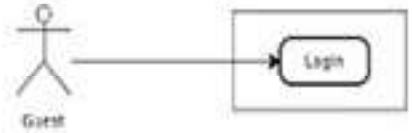
SERVER CLIENT

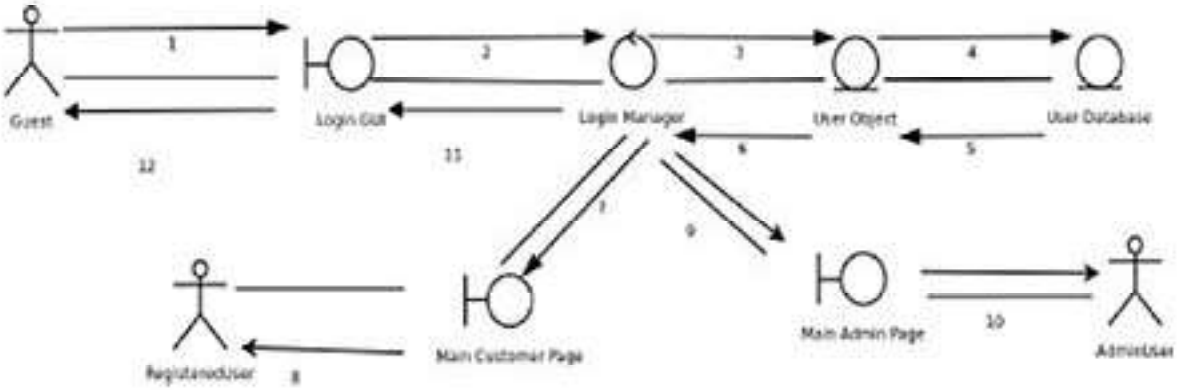
9. RESTful API returns json data to Angular API Service

FRONT END

10. $httpAPI returns data to Angular Service
11. Angular Service changes Angular Component GUI

3.2.2. ACCOUNT CONTROL: EXTERNAL



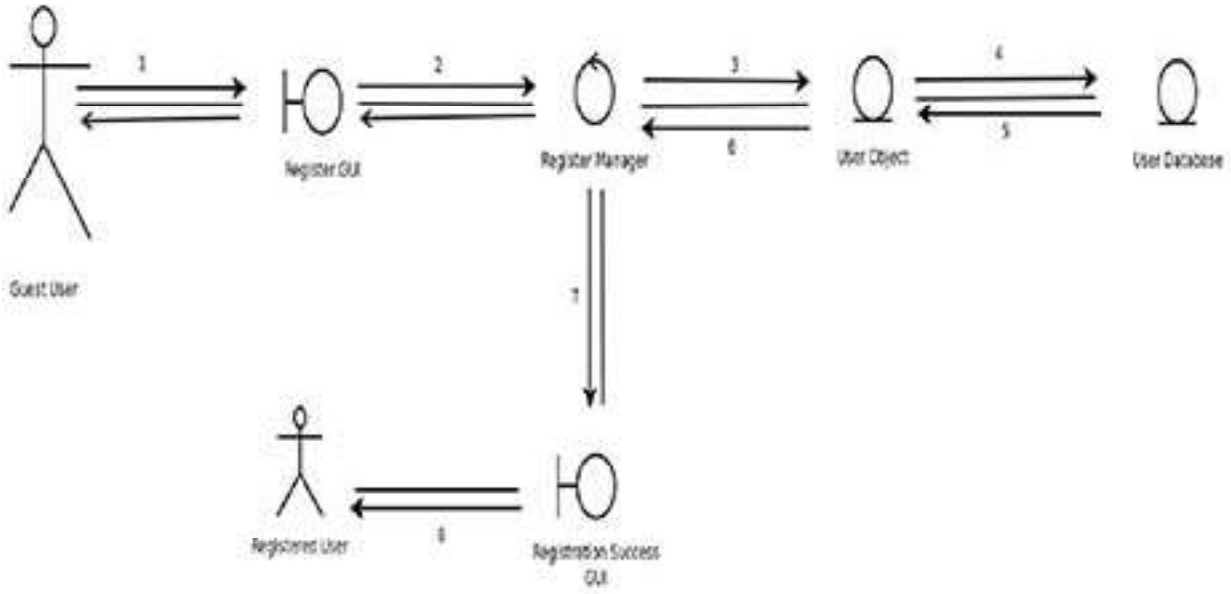


1. Guest User fills in account information on the login page
2. User info passed to login manager
3. Pass login info to user object
4. Login object queries user database with login info
5. User database passes back query results to user object
6. Login manager receives results
7. Login manager shows main customer page
8. System recognizes end user as Customer
9. Login manager shows main admin page
10. System recognizes end user as Admin

Exception 1
5. DB error sent to Login Object
6. Failure sent to Login Manager
11. Login manager presents failure message on GUI
12. Guest receives error message

Exception 2
7. First time login user present with choose interest page

Figure B2: Login



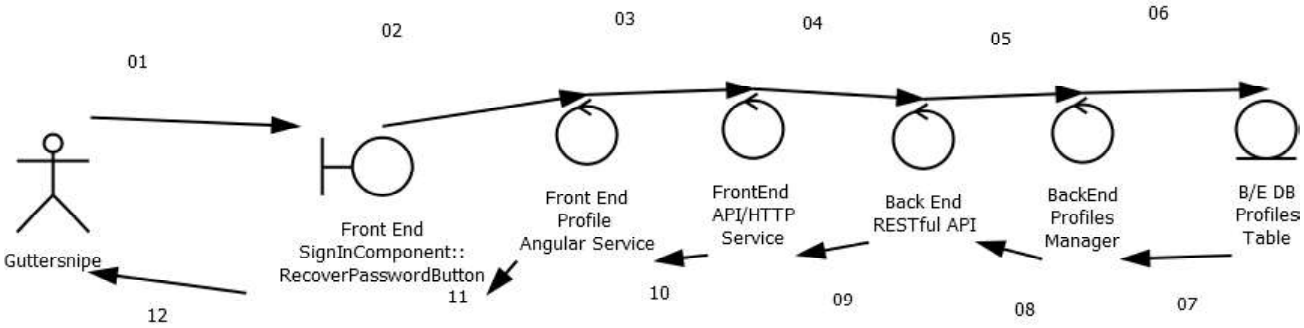
1. Guest User clicks on 'Register GUI' to be registered as a user.
2. The information is then passed to the register object.
3. This information is passed to the user object and generates password
4. The information is stored in the user database.
5. User database send the information to user object.
6. The correct information passed from the user object is then passed to register object.
7. This opens a new GUI and welcomes the new user
8. This turns a Guest User be a Registered User.

Exceptional Case:
1.The visitor enter the information and clicks 'Submit'.
2.The information is passed to Register Object.
9. The processed information is wrong so is returned to Register GUI.
10. Guest User is specified the information provided is wrong

B1: Register

03.01.02.03
Recover Password

FRONT END



1. User Interacts With GUI via Angular Components or Browser Address
2. GUI sends message to Angular Service
3. Angular Service sends message to Angular $httpAPI Service

CLIENT-SERVER

4. Front End $httpAPI service sends message to RESTful API Back End

BACK END

5. API sends message to Object Manager
6. Manager sends request to Database
7. Database returns object data to Object Manager
8. Object Manager returns formatted objects to RESTful API

SERVER CLIENT

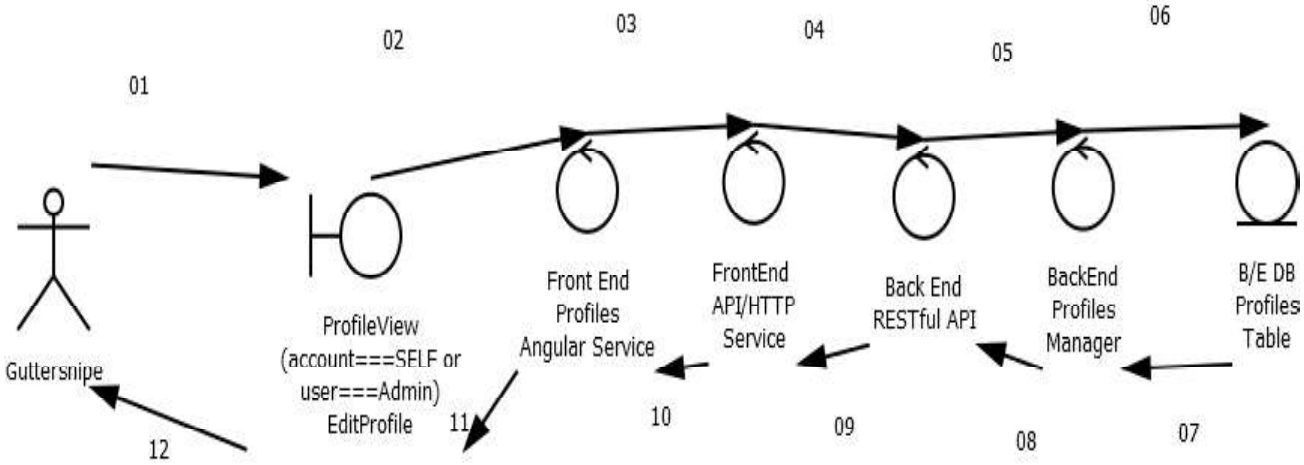
9. RESTful API returns json data to Angular API Service

FRONT END

10. $httpAPI returns data to Angular Service
11. Angular Service changes Angular Component GUI

3.2.3. ACCOUNT CONTROL: INTERNAL

03.01.03.01
Edit Profile



FRONT END

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CLIENT-SERVER

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8. Object Manager returns formatted objects to RESTful API

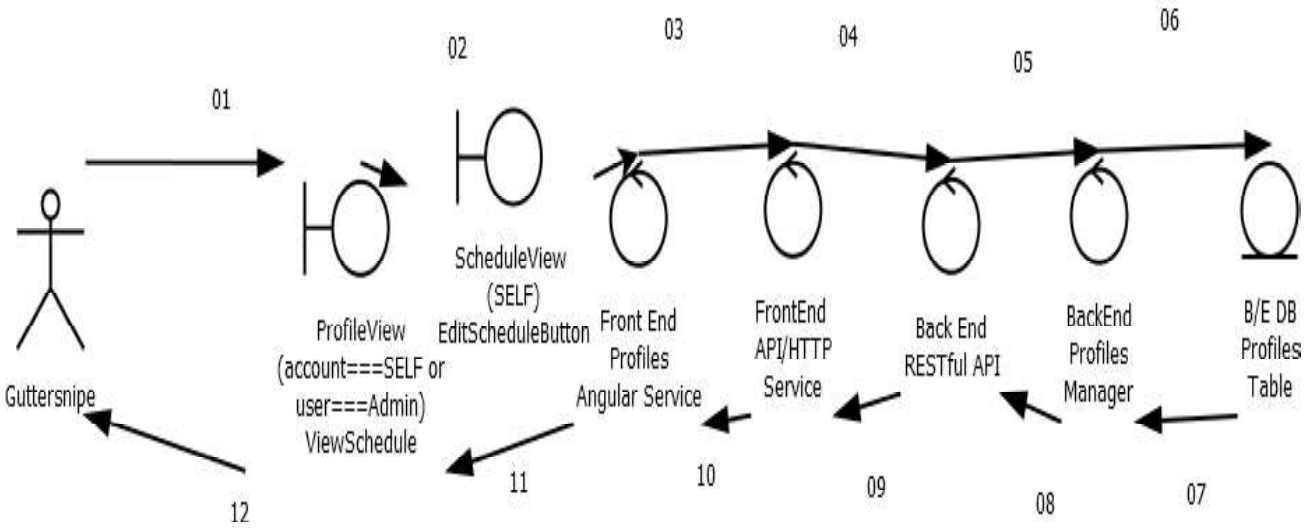
SERVER CLIENT

9. RESTful API returns json data to Angular API Service

FRONT END

10. $httpAPI returns data to Angular Service
11. Angular Service changes Angular Component GUI

03.01.03.02
Edit Schedule



FRONT END

1. User Interacts With GUI via Angular Components or Browser Address
2. GUI sends message to Angular Service
3. Angular Service sends message to Angular $httpAPI Service

CLIENT-SERVER

4. Front End $httpAPI service sends message to RESTful API Back End

BACK END

5. API sends message to Object Manager
6. Manager sends request to Database
7. Database returns object data to Object Manager
8. Object Manager returns formatted objects to RESTful API

SERVER CLIENT

9. RESTful API returns json data to Angular API Service

FRONT END

10. $httpAPI returns data to Angular Service
11. Angular Service changes Angular Component GUI

03.01.03.03
Renew Account

FRONT END

1. User Interacts With GUI via Angular Components or Browser Address
2. GUI sends message to Angular Service
3. Angular Service sends message to Angular $httpAPI Service

CLIENT-SERVER

4. Front End $httpAPI service sends message to RESTful API Back End

BACK END

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6. Manager sends request to Database
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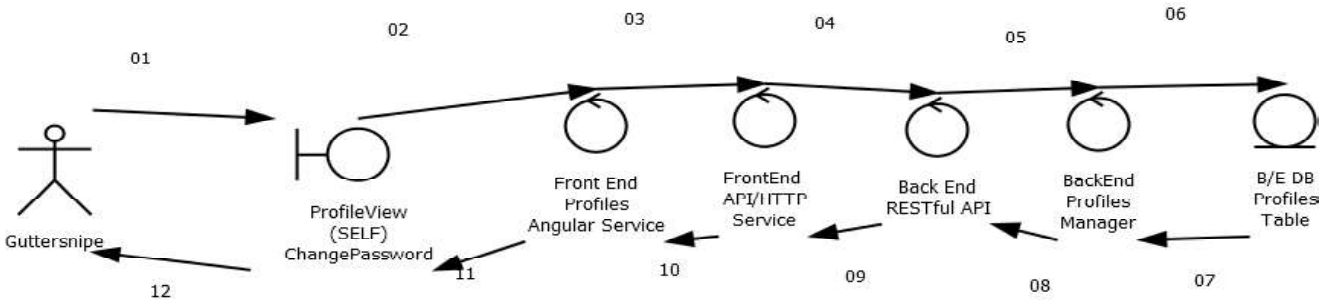
FRONT END

10. $httpAPI returns data to Angular Service
11. Angular Service changes Angular Component GUI

03.01.03.04
Change Password

FRONT END



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CLIENT-SERVER

4. Front End $httpAPI service sends message to RESTful API Back End

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FRONT END

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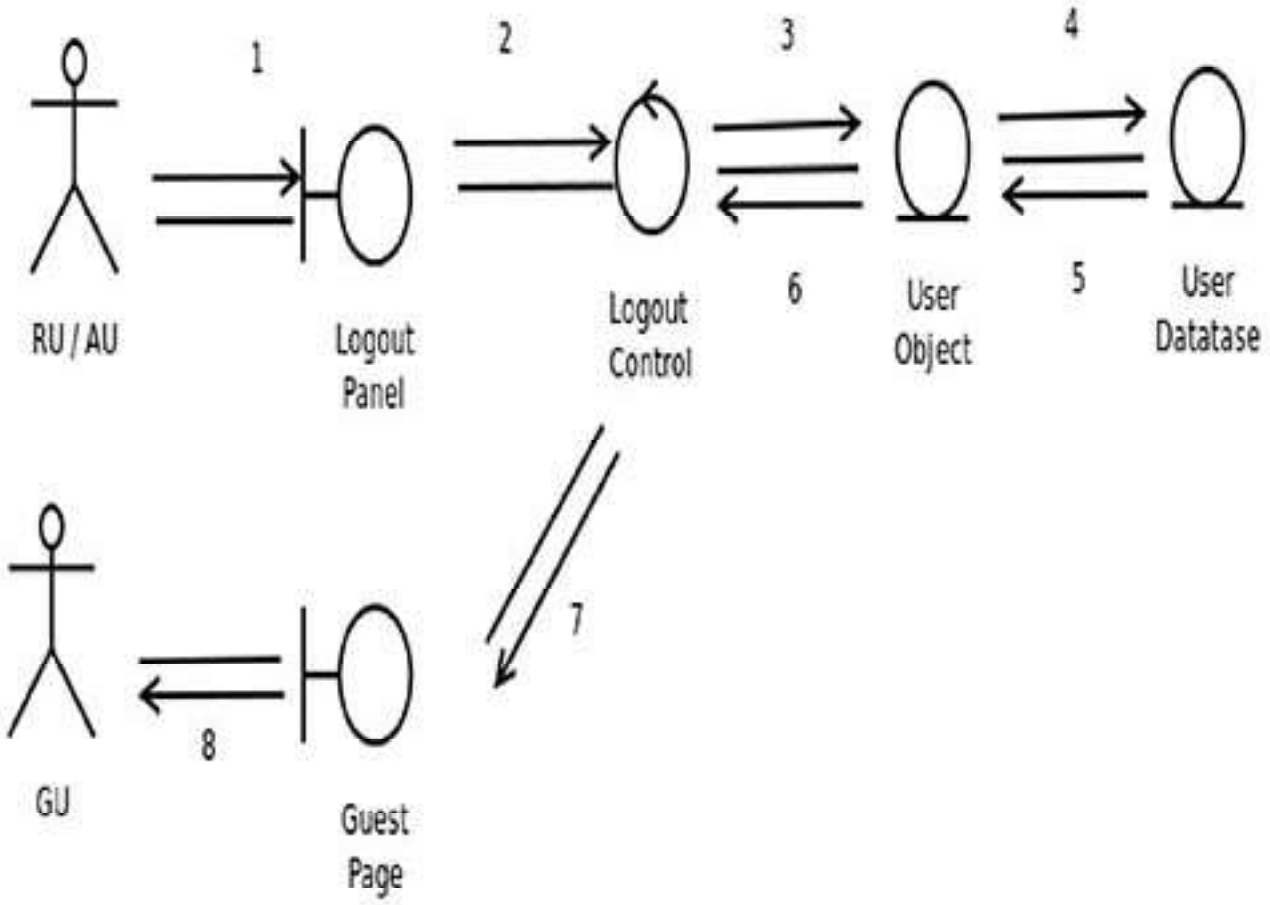
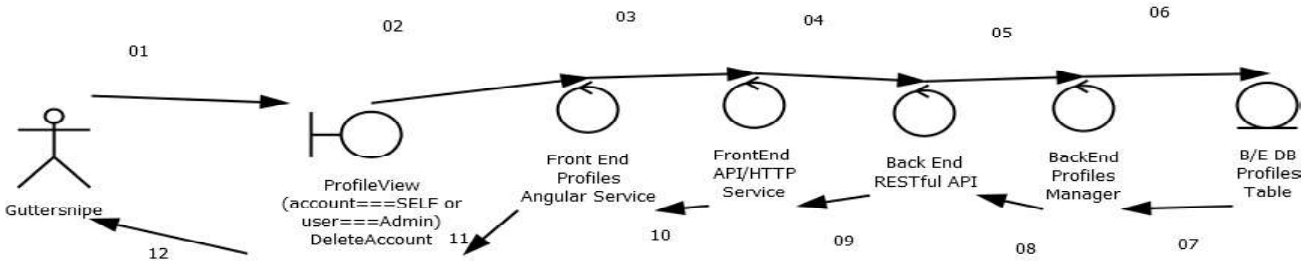
11. Angular Service changes Angular Component GUI



1. Registered User/Admin User clicks on the Logout button
2. Logout Control processes request, verifies user's desire to logout
3. Controller passes logout to user database, ends user's session, completes any pending transactions
4. Database returns results to Logout Control
5. Logout Control produces Guest page stating "You have now been logged out"
6 End User is now considered to be a Guest

Figure C8: Logout

03.01.03.05
Delete Account



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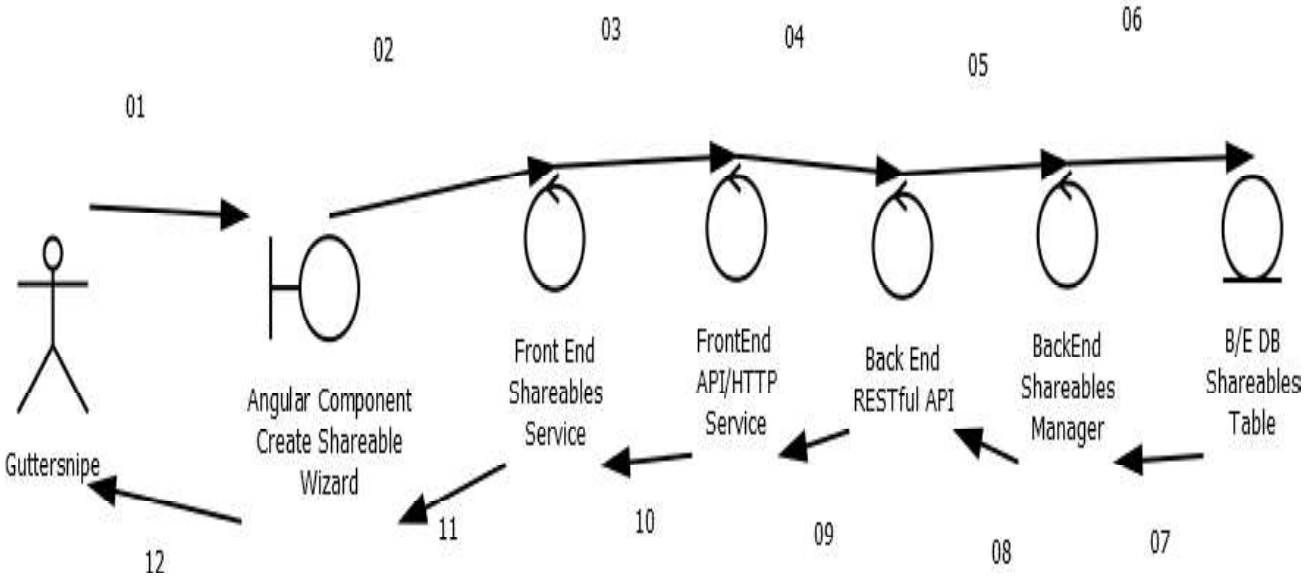
11. Angular Service changes Angular Component GUI

3.2.4. SHAREABLE: CREATE, UPDATE, DELETE

03.01.04.01
Create Shareable



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FRONT END

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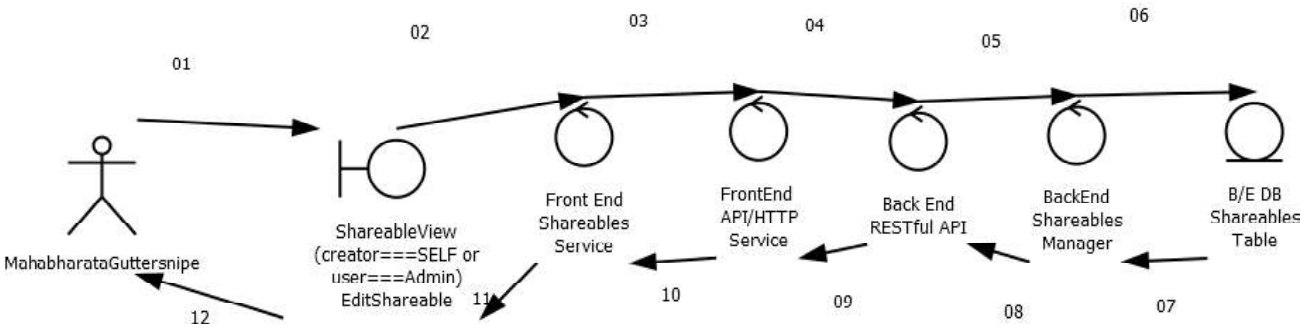
11. Angular Service changes Angular Component GUI

03.01.04.02
Edit Shareable



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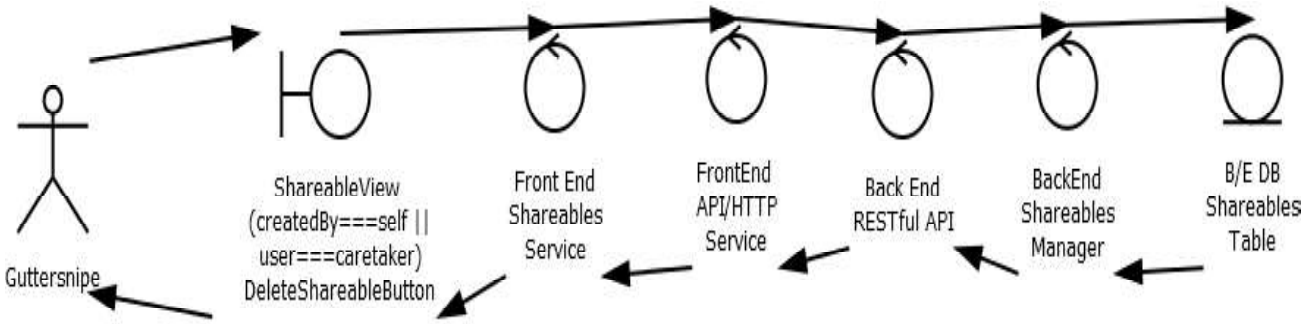
03.01.04.03
Delete Shareable



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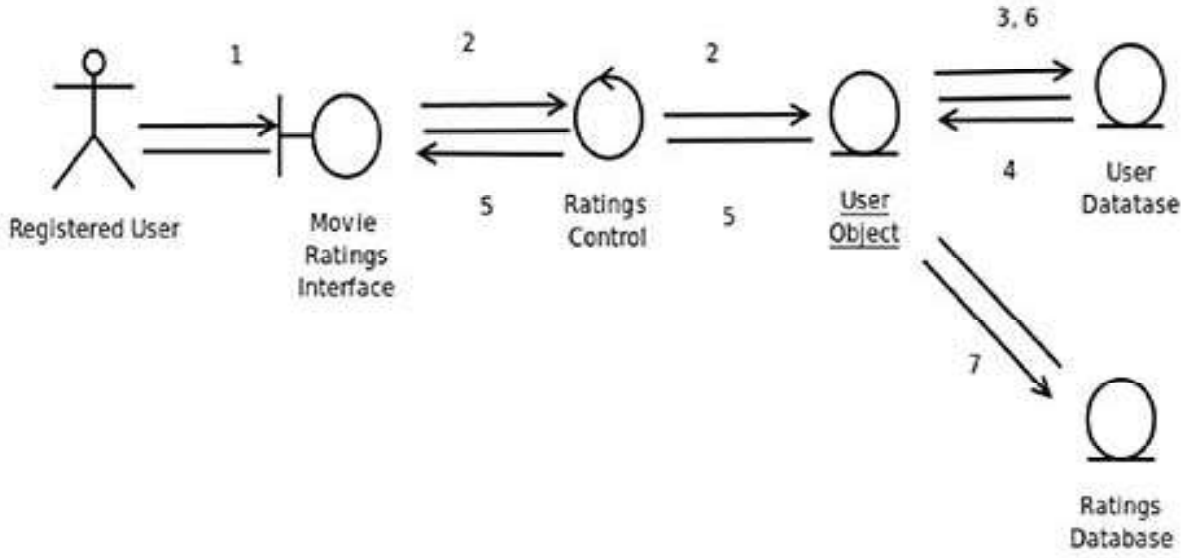
3.2.5. SHAREABLE: ANNOTATE

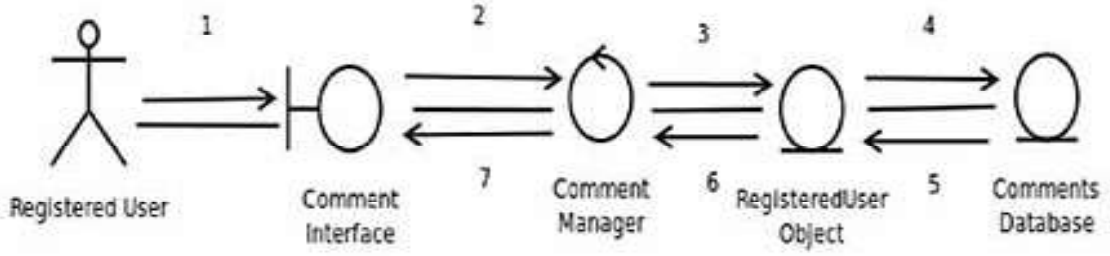


Figure

1. Registered User clicks on movie rating interface
2. Rating Interface submits UserID, MovieID, and Rating to Rating Control
3. Rating Control checks User DB to check User's ratings permissions
4. User DB returns RU's permissions
5. Ratings Control sends success or failure message back to Ratings GUI
6 Ratings Control updates Registered User Database to record Rating Behavior
7. Ratings Control updates Movie Database with new rating

Exceptions:
1. RU presses submit button without selecting a rating
2. RU does not have permissions to rate movie

Figure C2: Rate

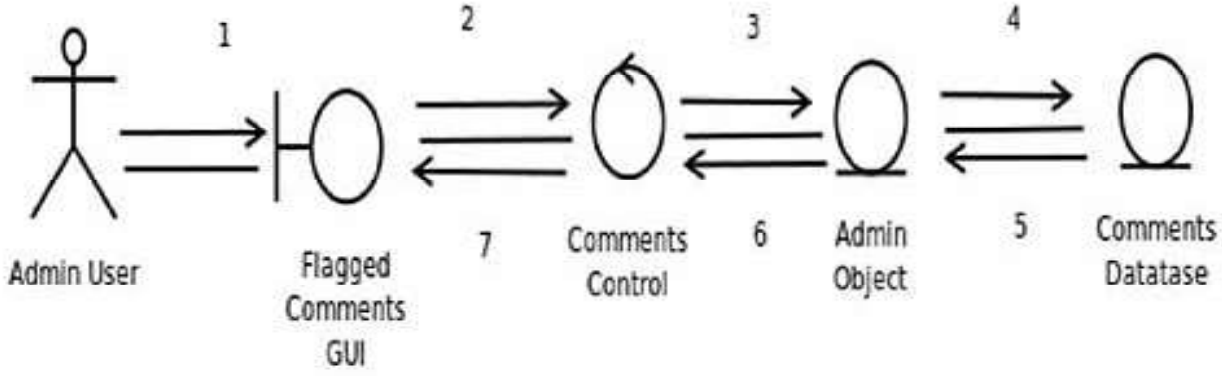


1. RU visits the comment interface of a movie page
2. RU submits comment to be processed by the comment manager
3. The Comment Manager accesses RegisterUser object to processes the comment with a timestamp
4. The data is inserted to Comments Database
5. The comment information is sent back to the RegisteredUser object
6. The comment information is passed back to the comment manager
7. The Comment Manager updates the Comment Interface with new comment(s)

Exception 1:
2. Blank comment is submitted
7. The comment manger displays an error message to the GUI

Exception 2:
2. A comment that exceeds the character limit is submitted
7. The comment manager displays an error message to the GUI

Figure C3: Comment

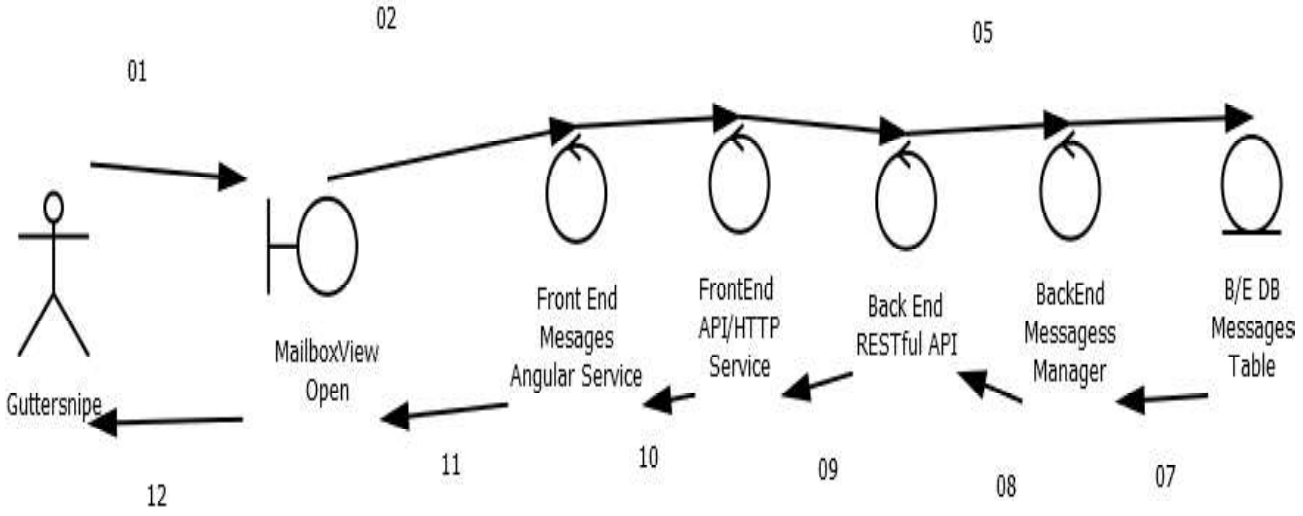


1. Admin User selects comments for deletion from Flagged Comments Panel
2. GUI sends deletion request to Comments Control
3. Comments to be deleted are sent to Database
4. Comments are sent to comments database
5. Database returns remaining Flagged Comments from Database
6. The remaining flagged comments are sent to comments control
7. The remaining Flagged Comments are displayed on the GUI

D1: Erase Comment

3.2.6. COMMUNICATIONS

03.01.06.01
Open Mailbox



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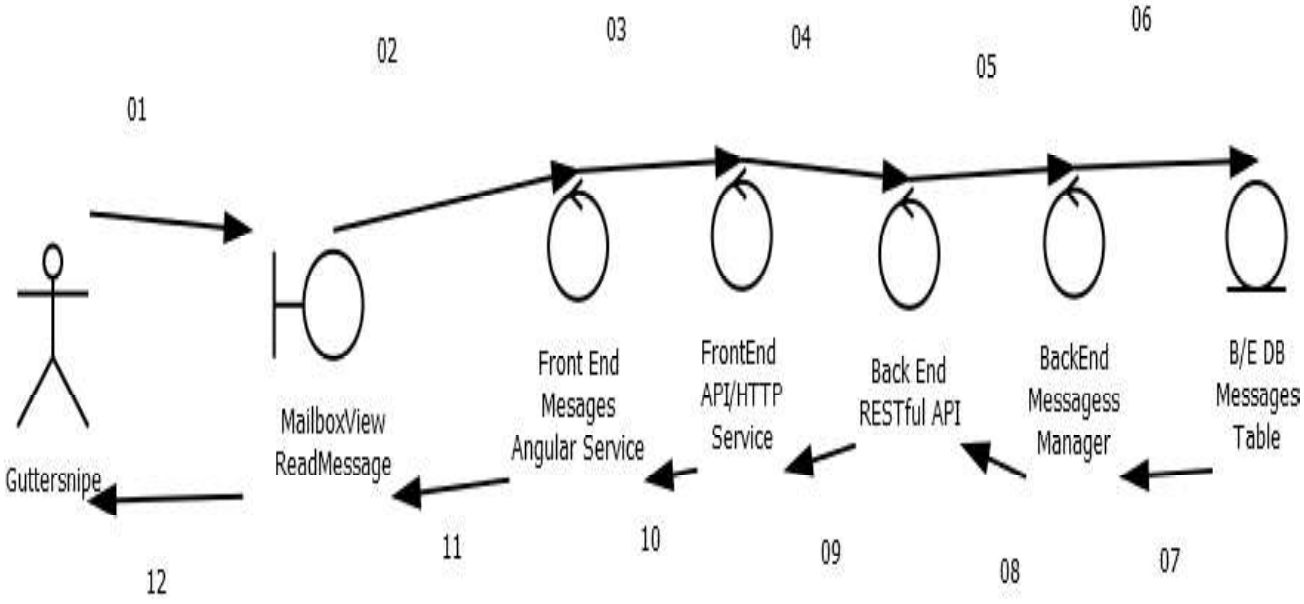
03.01.06.02
Read Message



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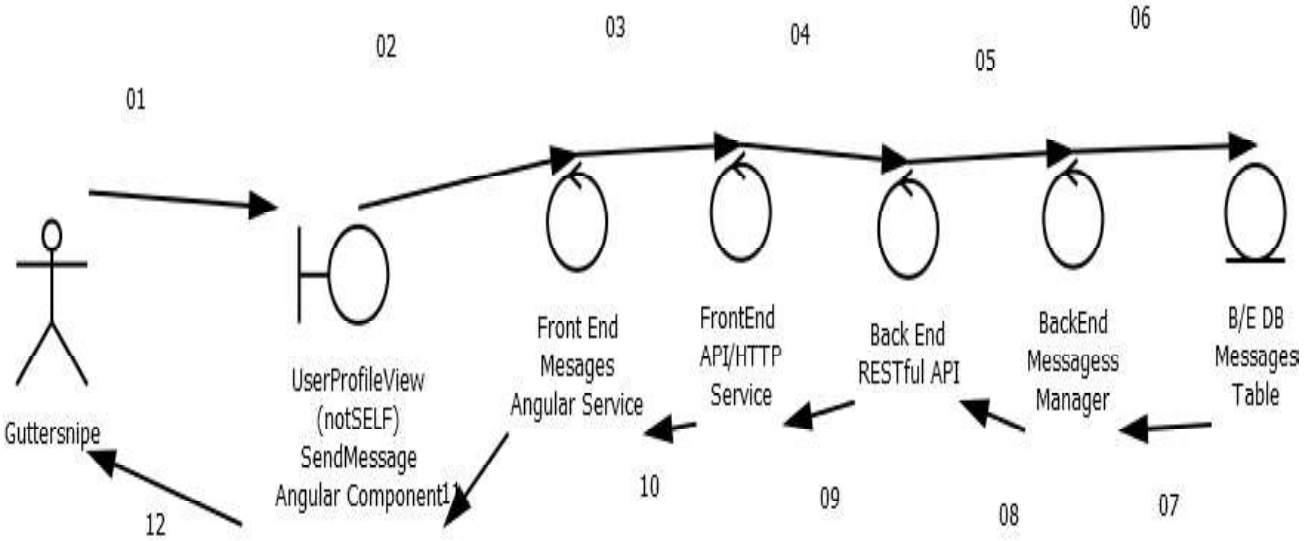
03.01.06.03
Send Message



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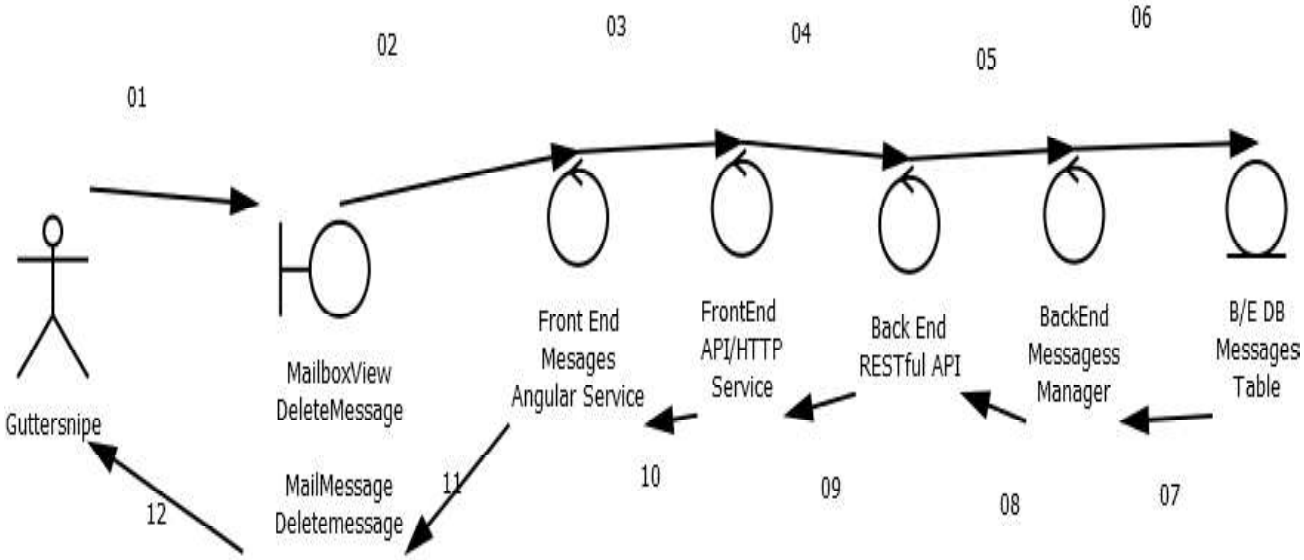
03.01.06.04
Delete Message



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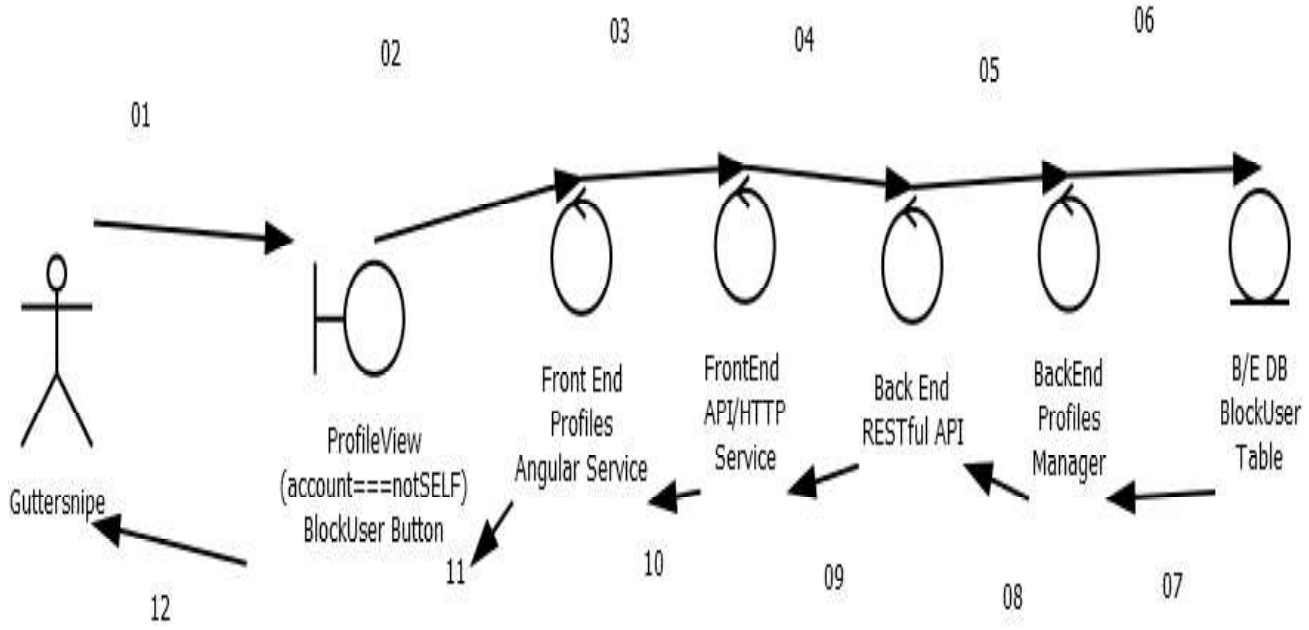
03.01.06.05
Block User



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