Team Up

Software Requirements Specification

Version 1.0

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Revision History

Date	Version	Description	Author
03/23/2020	1.0	Initial Plan	Team A

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Software Requirements Specification

1. Introduction

1.1 Purpose

The purpose of this document is to describe the requirements of the Team Up software. The document will detail the software's purpose, functionality, and design structure. This includes the different types of users the software will interact with, the manner in which it will do so, and any constraints the software is subject to.

1.2 Scope

Team Up is a web application that will help users find team members to work on altruistic projects together. The application will have a directory of projects that is available to users, as well as a directory of registered users that can be used by users to find team members for a given project.

Team Up has a "reputation score" system where each user will have a reputation score visible to other users. Users can gain points from referrals, by receiving a positive evaluation after completing a project, and being given points by a super user receiving compliments from other users**.** Users can lose points by being kicked from a group, receiving a negative evaluation after completing a project, having their points deducted by a super user after having a complaint made about them, or using taboo words.

Team Up has a group system where users can invite other users to work on a project. The system will also include group management mechanisms; group members will be able to vote on and schedule meet-up times, discipline or praise group members based on their behavior, and close a group to declare a project completed.

Team Up has an administration system that allows super users to moderate users of the application. The administration system includes functions such as approving new user sign-ups, responding to user appeals and reports, appointing VIP users as group evaluators, and rewarding users with reputation points as necessary.

1.3 Definitions, Acronyms, and Abbreviations

Term	Definition
Figma	Figma is a browser-based UI and UX design application, with design, prototyping, and code-generation tools.
Graphical User Interface (GUI)	An interface with graphical components that the user can interact with to use the application
JSON	JavaScript Object Notation; a format for storing and sharing data
Ordinary User (OU)	A user that has been approved after submitting a sign-up form
Relational Database Management System (RDBMS)	A system used to create and manage a relational database
SQL	Structured Query Language; a language used to retrieve and manipulate data in databases
Super User (SU)	A user at the highest level of the user hierarchy; is responsible for administrative functions
VIP	An OU that has met a certain reputation score threshold chosen by the SUs
Visitor	A non-registered user of the application
Web Application	A software application that is accessed by a user through the internet, using a web browser

1.4 References

Schach, S. R. *Object-Oriented and Classical Software Engineering*. McGraw-Hill, 2011.

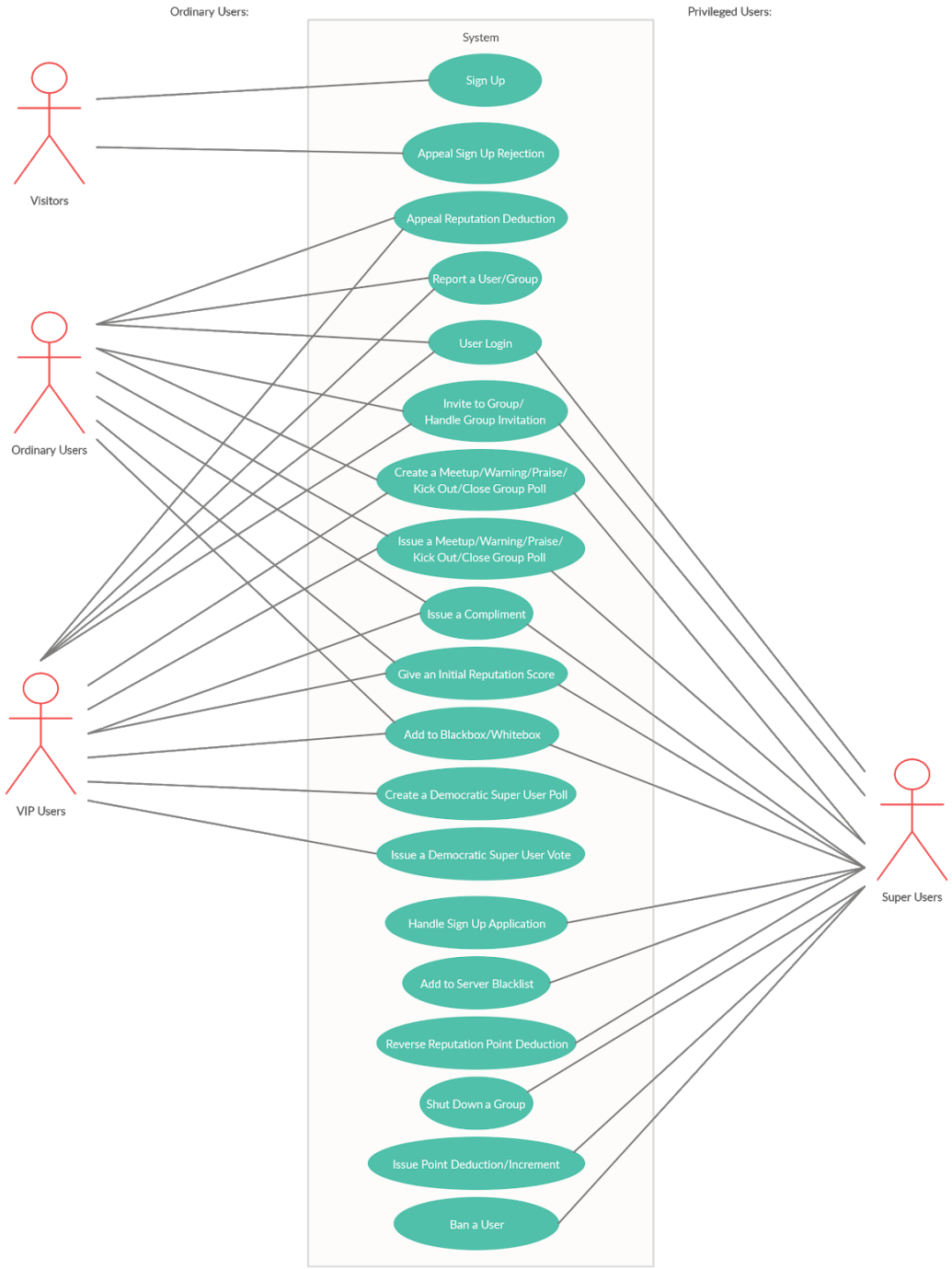
1.5 Overview

The rest of this document details the requirements of the Team Up software. It is split up into three sections: an overall description, specific requirements, and supporting information. Each section is divided into further subsections.

The overall description contains a use-case diagram. It also includes any dependencies that the software relies on to function properly. The specific requirements section lists the software's use-cases, including a description of user type, use-case, and the associated permissions.The supporting information section includes images that showcase prototypes of the user interface.

2. Overall Description

2.1 Use-Case Model Survey



2.2 Assumptions and Dependencies

General assumptions for all users of the application:

- Since the application is a web based application there is a need for the internet browser. It is assumed that the users have access to the internet and any type of browser (Chrome, Mozilla Firefox, Microsoft Edge, Opera, Safari, etc.).
  It is also assumed that the user is familiar with an internet browser and knows how to use it.

3. Specific Requirements

3.1 Use-Case Reports

Non-functional Requirements

1. Visitors
   a. The visitors are non-registered users who interact with the application. They are capable of signing up for member registration and can appeal for rejections.
2. Ordinary Users
   a. The ordinary users are registered users who are capable of creating polls, issuing votes, inviting others to groups, reporting users and groups, and auto-accepting or auto-rejecting invitations.
3. VIP Users
   a. The VIP users are registered users who have the same features as an ordinary user; in addition, they are able to vote for a Democratic Super User.
4. Super User
   a. The super user is at the highest level of the user hierarchy. They are responsible for administrative tasks and have direct access to special functions that affect point manipulation, user blacklisting, and group closures. In addition, they are able to behave as ordinary users and participate in Team Up.

Functional Requirements

1. *Sign Up [Visitors]*
   a. Visitors have the ability to request membership on Team Up. They must provide their name, email, interests/hobbies and the member who referred them (OU or VIP).
2. *Appeal Sign Up Rejection [Visitors]*

    a. Visitors have the ability to appeal their application if it was rejected. However, if they are rejected again, they will be added to a blacklist and cannot utilize the Sign Up feature again.

3. *User Login [OU, VIP, Super User]*
    a. Ordinary Users, VIPs, and Super Users have the ability to log in to their accounts. Users must provide their account ID and their password.
4. *Invite To a Group [OU, VIP, Super User]*
    a. Ordinary Users, VIPs, and Super Users have the ability to invite another user to a group.
5. *Handle a Group Invitation [OU, VIP, Super User]*
    a. Ordinary Users, VIPs, and Super Users have the ability to accept or reject an invitation. If they reject the invitation, they must provide the reason.
6. *Create a Poll to Meet Up[OU, VIP, Super User]*
    a. Ordinary Users, VIPs, and Super Users have the ability to create a poll for meet-up times. The time slot with most votes gets selected.
7. *Create a Poll to Warn [OU, VIP, Super User]*
    a. Ordinary Users, VIPs, and Super Users have the ability to create a poll that determines whether an Ordinary User or VIP deserves a warning. This poll must be unanimous in order to extend a warning.
8. *Create a Poll to Praise [OU, VIP, Super User]*
    a. Ordinary Users, VIPs, and Super Users have the ability to create a poll that determines whether an Ordinary User or VIP deserves praise. This poll must be unanimous in order to extend a praise.
9. *Create a Poll to Kick-Out [OU, VIP, Super User]*
    a. Ordinary Users, VIPs, and Super Users have the ability to create a poll that determines whether an Ordinary User or VIP deserves to be kicked out. This poll must be unanimous in order to kick out the member.
10. *Create a Poll to Close Group [OU, VIP, Super User]*
    a. Ordinary Users, VIPs, and Super Users have the ability to create a poll that determines whether a group should be closed. This poll must be unanimous in order to close the group.
11. *Issue a Meet-up Vote [OU, VIP, Super User]*

a. Ordinary Users, VIPs, and Super Users have the ability to extend a meet-up vote for a particular time-slot from a poll.

12. *Issue a Warning Vote [OU, VIP, Super User]*
    a. Ordinary Users, VIPs, and Super Users have the ability to extend a warning vote for a particular member from a poll.
13. *Issue a Praise Vote [OU, VIP, Super User]*
    a. Ordinary Users, VIPs, and Super Users have the ability to extend a praise vote for a particular member from a poll.
14. *Issue a Kick-Out Vote [OU, VIP, Super User]*
    a. Ordinary Users, VIPs, and Super Users have the ability to extend a kick-outvote for a particular member from a poll.
15. *Issue a Close-Group Vote [OU, VIP, Super User]*
    a. Ordinary Users, VIPs, and Super Users have the ability to extend a kick-out vote for a particular member from a poll.
16. *Issue a Compliment [OU, VIP, Super User]*
    a. Ordinary Users, VIPs, and Super Users have the ability to extend a compliment for a particular member.
17. Add to Whitebox *[OU, VIP, Super User]*
    a. Ordinary Users, VIPs, and Super Users have the ability to add a member to their whitebox.
18. Add to Blackbox *[OU, VIP, Super User]*
    a. Ordinary Users, VIPs, and Super Users have the ability to add a member to their blackbox.
19. *Appeal a Reputation Deduction [OU, VIP]*
    a. Ordinary Users, VIPs have the ability to appeal a point reduction issued by a Super User if they were kicked from a group.
20. *Report a User [OU, VIP]*
    a. Ordinary Users, and VIP users have the ability to report a user. Super User can respond to Reports by issuing point deductions or kicking out OUs involved from the system
21. *Report a Group [OU, VIP]*
    a. Ordinary Users, and VIP users have the ability to report a group. Super User can respond to reports by shutting down a group or kicking out OUs involved from the system
22. *Give an Initial Reputation Score [OU, VIP, Super User]*

a. Ordinary Users, VIPs, and Super Users have an ability to give an initial Reputation score for any new OUs who used them as referral.
    i. OUs can give a score between 0-10
    ii. VIPs/Super Users can give a score between 0-20

23. *Create a Democratic Super User Poll [VIP]*
    a. VIPs have the ability to create a Poll in order to vote one VIP as the democratic Super User.
24. *Issue a Democratic Super User Vote [VIP]*
    a. VIPs have the ability to vote one VIP as the democratic Super User.
25. *Handle Sign Up Application [Super User]*
    a. Super User has the ability to verify the information of the visitor registering an account. If approved, an email is sent to the user which includes their credentials (account ID and password)
26. *Add to Server Blacklist [Super User]*
    a. Super Users have the ability to ban a user from Team Up by adding them to the blacklist.
27. *Reverse Reputation Point Deduction [Super User]*
    a. Super Users have the ability to reverse a reputation point deduction.
28. *Shut Down a Group [Super User]*
    a. Super User can respond to the reports by shutting down a group
29. *Issue Point Deduction [Super User]*
    a. Super User can respond to the reports by deducting a user's points
30. *Issue Point Increment [Super User]*
    a. Super User can respond to the reports by incrementing a user's points
31. *Ban a User [Super User]*
    a. Super User can respond to the reports by banning a user

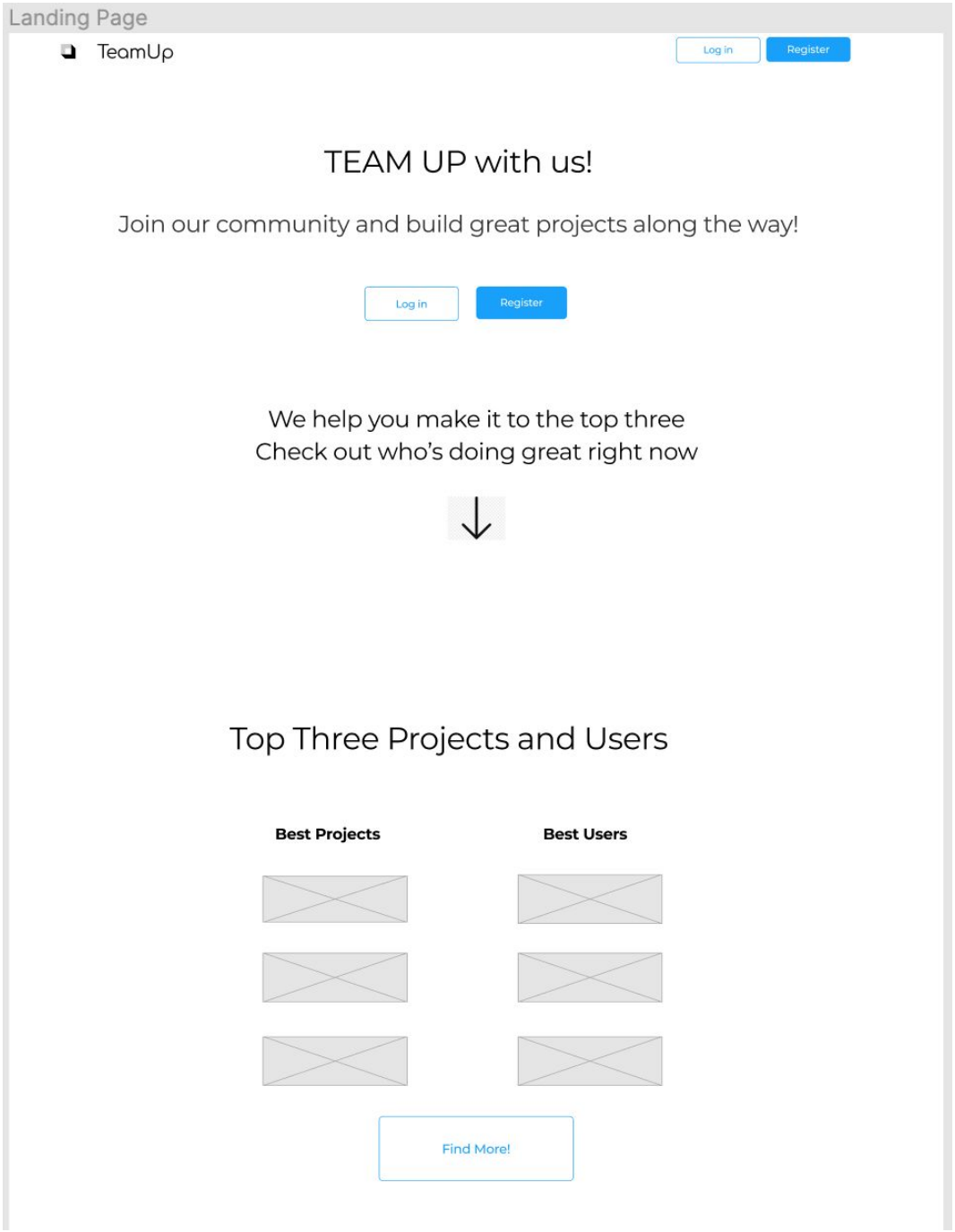
3.2 Supplementary Requirements

- Each user will have their own main page with customized notifications and features depending on their hierarchy. This information is routinely updated by the server. Here is a layout of what each user should see on their main page.
    - Visitors
        - Visitors are able to peek into several pages without restriction. This includes a landing page that displays the top users and groups, a page that allows one to explore other groups and users, and finally the sign up and login page.
    - Ordinary Users
        - Their groups, invitations, initial reference reputation score requests, whitebox and blackbox. In addition, they will have the option to create a group.
    - VIP Users:
        - Everything the ordinary user has along with the additional feature of electing a Democratic Super User.
    - Super Users:
        - Everything an ordinary user has along with pending reports, complaints, compliments and group closures.
- Group pages should display any upcoming meetups for that particular group and the most recent polls and posts.
- Data transfer between the web application and backend server will utilize JSON. Data storage, managed by the backend server, will utilize a SQL server.
- Any updates with regards to the above-mentioned features will pull the latest data from the SQL database upon page refresh.

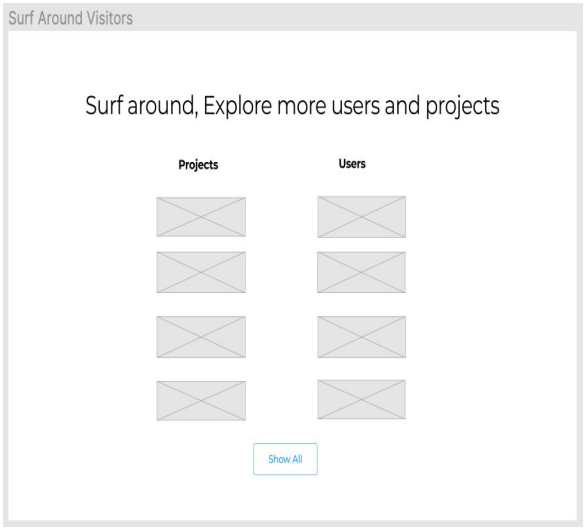
4. Supporting Information

For supporting information, we created the user interface prototype for each user of the web application (Visitor, Ordinary User, VIP, Super User). These prototypes are used as a starting point to help developers have a better understanding of the overall User Interface of the web application as perspectives of visitors, OUs, VIPs, and SUs. These rough drafts will be developed upon along the way and are used to consolidate the overall ideas on pages and components of the web app.

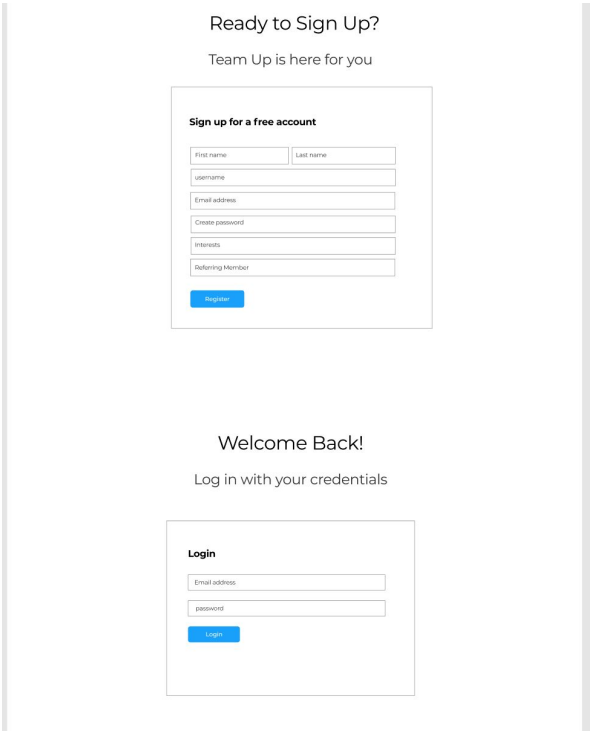
Landing Page (Home Page)



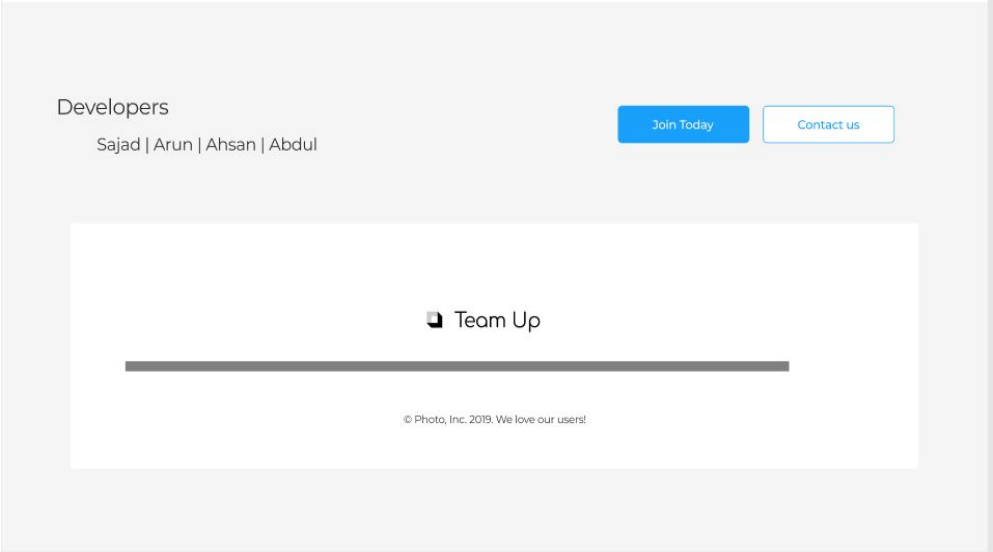
Surfing around for more, as a visitor



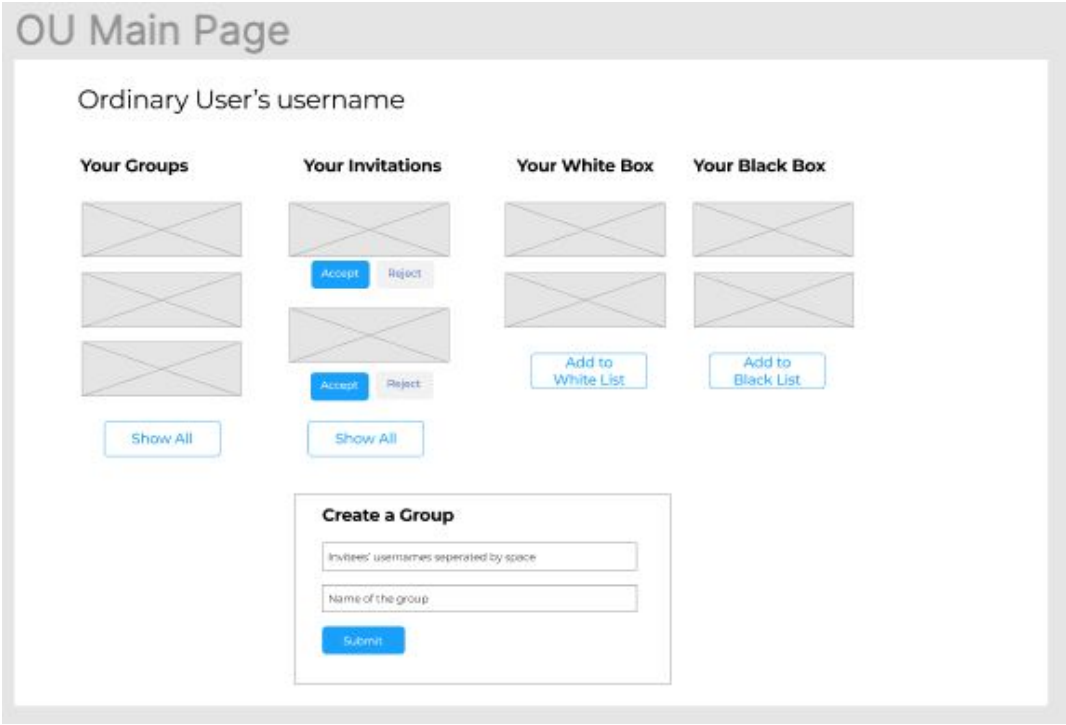
Sign up and Login pages



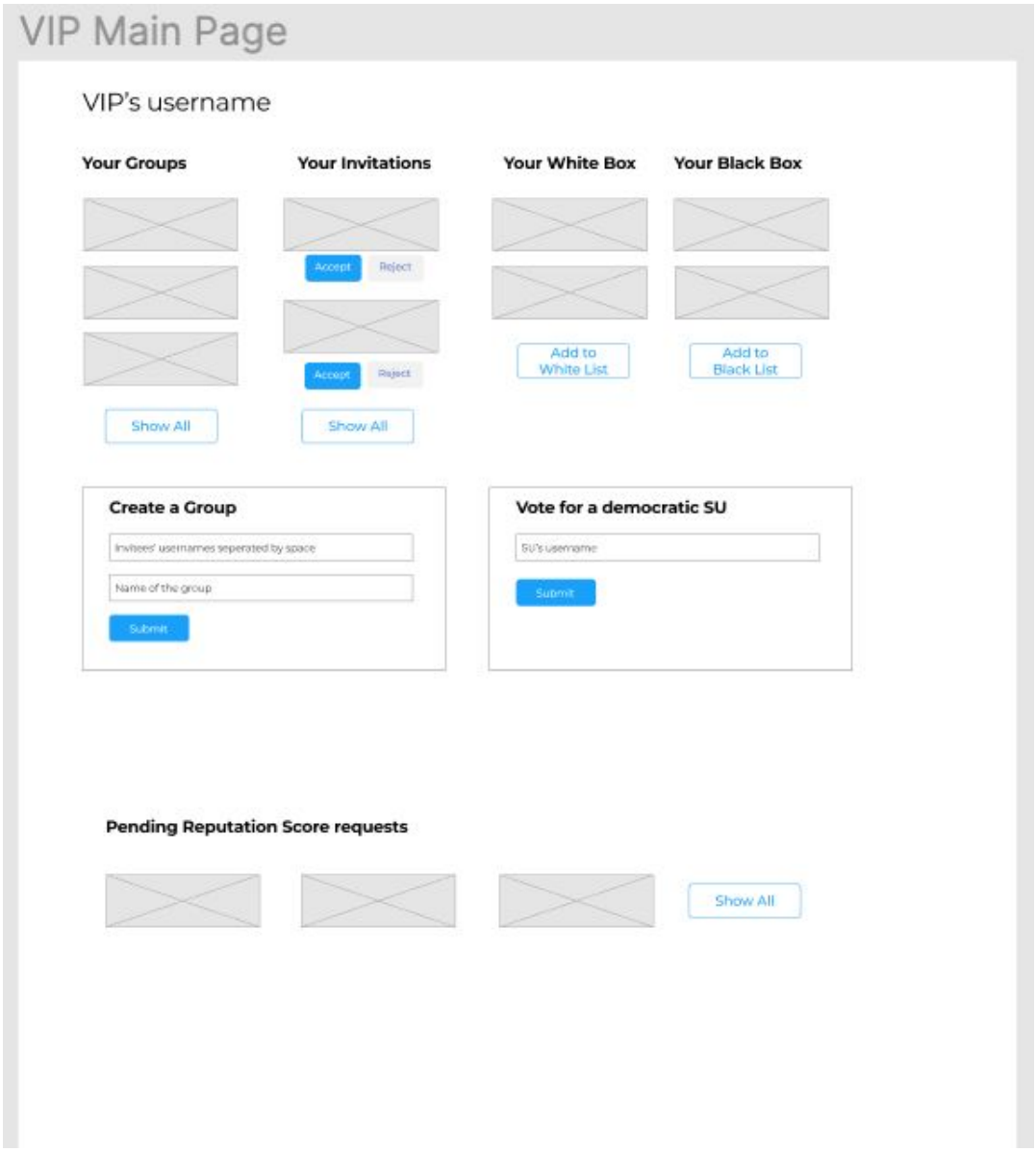
Footer for Home page



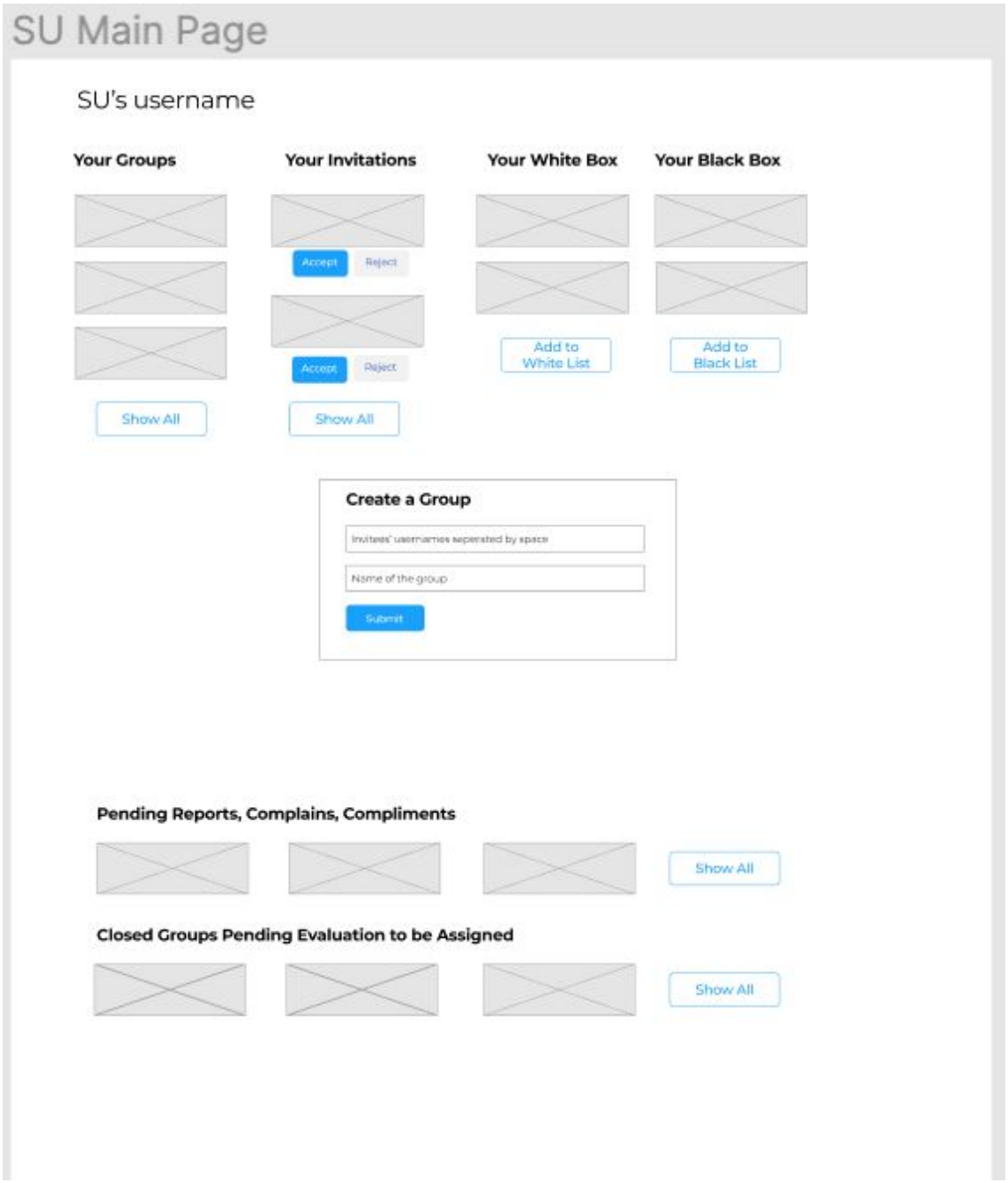
Main Page for Ordinary User



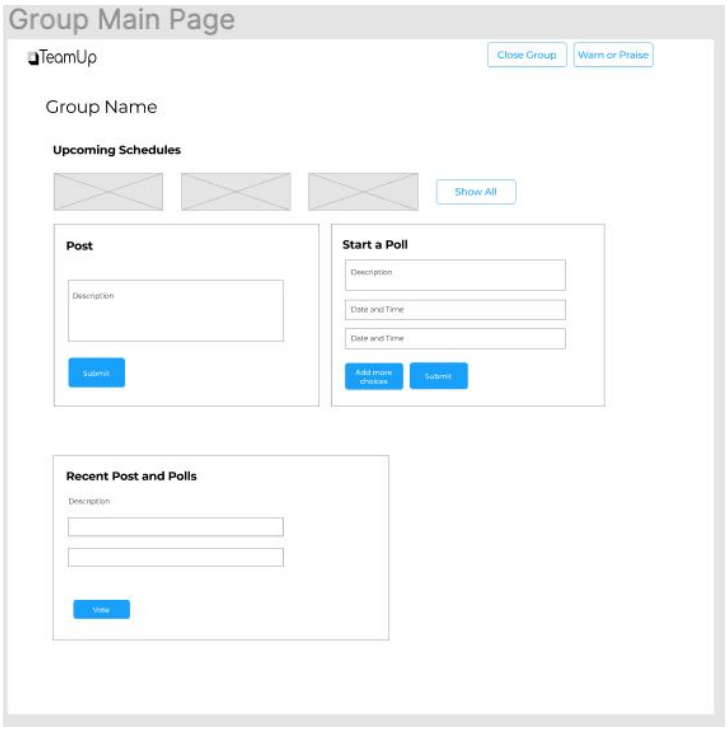
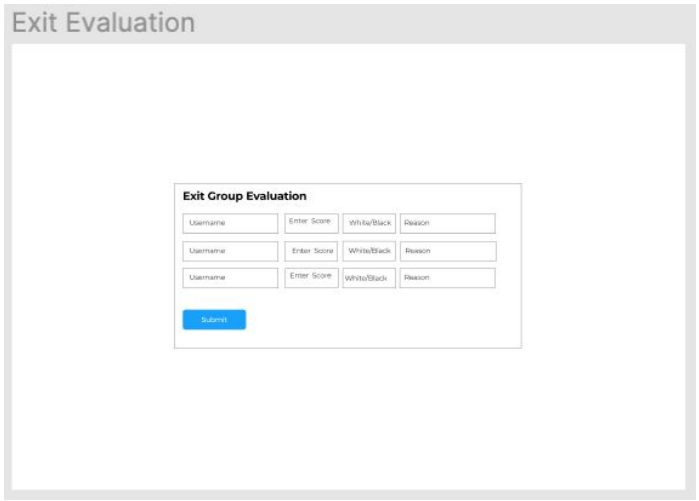
Main Page for VIP user



Main Page for Super User



Group Page



Exit Evaluation Page