

Project: **Grizz Housing**

Stakeholder Register & System Requirements

Presented to

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Stakeholders

Stakeholder Name	Position	Internal	Role
Gaby		<input checked="" type="checkbox"/>	
Ori		<input checked="" type="checkbox"/>	
Elli		<input checked="" type="checkbox"/>	
Ruma		<input checked="" type="checkbox"/>	
Kelly		<input checked="" type="checkbox"/>	
Dr. Yaman R****			Project Manager

Functional Requirements

ID	Requirement Statement	Must/Want	Comments
FR001	The system shall allow users to sign up using their OU email, then authenticate that via SSO	Must	
FR002	The system shall allow users to sign in using SSO with OU system	Must	
FR003	The system shall allow user to request account deletion	Must (Apple Policies)	https://developer.apple.com/app-store/review/guidelines/#5.1.1v
FR004	The system shall allow user to link up their social profiles to their account	Want	
FR005	The system shall allow users to update their information via a Profile screen	Must	
FR006	The system shall allow users to set their preferences on apartments	Must	
FR007	The system shall allow users to search	Must	
FR008	The system shall allow users to save a listing	Must	

FR009	The system shall allow users to contact a merchant	Must	
FR010	The system shall allow users to filter	Must	
FR011	The system shall allow users to sort	Must	
FR012	The system shall allow users to report a false listing	Want	
FR013	The system shall allow users to share a listing	Must	
FR014	The system shall allow users to add payment.	Must	
FR015	The system shall allow users to remove payment	Must	
FR016	The system shall allow users to update payment	Must	
FR017	The system shall allow users to link external payment services	Must	
FR018	The system shall allow users to split payment methods	Must	
FR019	The system shall allow users to split payment with roommates	Must	
FR020	The system shall allow users to set up auto-pay	Must	

FR021	The system shall allow users to request late payment to landlord.	Want	
FR022 (E)	The system shall allow users to draft and publish reviews of apartment complexes/Landlords	Must	
FR023	The system shall allow users to edit reviews they have written	Must	
FR024	The system shall allow for users to comment on reviews from other users	Want	
FR025	The system shall allow the users to rate apartments on a star-scale (0-5)	Must	
FR026	The system shall utilize user-collected data to provide the best possible advertisement experience	Must	
FR027	The system shall evaluate pricing of apartments compared to similar apartments and inform the user of this	Want	
FR028	The system shall show users comparable apartments to others that they have favorited and/or liked	Want	

FR029 (E)	The system shall enable users to create and share new listings and notify users of new listings	Must	
FR031	The system shall notify users of a price drop in their favorite listings	Want	
FR032	The system shall enable chats between users and notify users of a new chat	Must	
FR033	The system shall notify users of a due payment	Must	
FR034	The system shall enable application submissions and notify listers of application submissions	Must	
FR035	The system shall enable application selection and notify users of an application approval/selection	Must	
FR0036	The system shall enable roommate matching and notify roommate match	Must	

Non-Functional Requirements

ID	Requirement Statement	Must/Want	Comments
UR001	The system shall use Grizz Housing's official colors (Black and Powder Blue)	Must	
UR002	The system shall have language options.	Want	
UR003	The system shall have different currency options.	Want	
UR003	The system shall have a support and resources section.	Must	
UR004	The system shall have a FAQs section.	Want	
UR005	The system shall have 14pt body text font. The font should be one of the sans-serif type, and with a 4.5 to 1 or greater contrast ratio, to accomodate requirements set by the ADA.	Want	https://uxdesign.cc/guide-for-designing-better-mobile-apps-typography-5796495ef86f
UR006	The system shall adapt to different screen sizes.	Want	https://developer.apple.com/design/human-interface-guidelines/components/system-

			experiences/widgets/
UR007	The system shall adapt to portrait and landscape orientation.	Want	https://developer.apple.com/design/human-interface-guidelines/foundations/layout/

Reliability Requirements

ID	Requirement Statement	Must/Want	Comments
RR001	The system shall be available 99.99%	Must	
RR002	The system shall have less than 1 failure per 160 hours of operation (ROCOF)	Must	https://greg4cr.github.io/courses/spring17csce747/Lectures/Spring17-Lecture27StatTesting.pdf
RR003	The system shall have less than 1 failure per 50,000 requests (POFOD)	Must	https://greg4cr.github.io/courses/spring17csce747/Lectures/Spring17-Lecture27StatTesting.pdf
RR004	The system shall be able to match the user with their desired apartments with at least 2 points while filters are on	Must	
RR005	The backend server shall use load balancing and be able to redirect all requests to the functioning instance when one has failed	Want	If we can't build load balancing server, we just need to pay more onto our "one" server instance
RR006	The domain's SSL certificate should be renewed at least 1	Must	

	month before the expiration date to avoid interrupting user requests over unsafe connections		
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Performance Requirements

ID	Requirement Statement	Must/Want	Comments
PR001	The system shall have a response time of 500ms	Must	From textbook
PR002	The system shall be able to support 2500 client session simultaneously	Must	https://www.tricentis.com/blog/how-to-test-application-throughput
PR003	The system shall have the same response time for all simultaneous sessions	Must	From textbook
PR004	The system shall have a near zero recovery time.	Must	https://www.techtarget.com/whatis/definition/recovery-time-objective-RTO .
PR005	The system shall have an app startup of 2 seconds.	Must	https://developer.android.com/topic/performance/vitals/launch-time
PR006	The system shall have a throughput of 460 transactions per second.	Must	https://www.tricentis.com/blog/how-to-test-application-throughput

Security Requirements

ID	Requirement Statement	Must/Want	Comments
SR001	All connection within the system (Landing Page URLs, Portal URL, or backend APIs) must be served over HTTPS	Must	
SR002	All passwords sent to the server should hashed before saving to the database	Must	
SR003	Password must have a minimum length of 8 characters	Must	
SR004	Password must contains at least one special character	Must	
SR005	Password must contains at least one numeric character	Must	
SR006	Password must contains at least one uppercase and one lowercase character together	Must	
SR007	The database should be able to prevent injection	Must	
SR008	The database should be password-projected or user-based permitted	Must	

Design Constraints

ID	Requirement Statement	Must/Want	Comments
DR001	The app's final bundled size should be less than 200 MB	Must	Similar apps like AirBnB only takes around 180-190 MB (on Android), and less on iOS
DR002	The app's UI should be able to handle landscape orientation on user's device	Want	
DR003	The app's UI should able to handle changes when the user is using the app on a tablet device	Must	
DR004	The app shall use a font provided by Google Fonts to avoid copyrights issue	Must	

Implementation Requirements

ID	Requirement Statement	Must/Want	Comments
IMR001	The system shall use React Native as the framework for developing the app to both platforms (Android & iOS)	Must	
IMR002	The system shall use MongoDB as the database	Must	
IMR003	The backend system shall be hosted on AWS Elastic Beanstalk	Must	
IMR004	The landing page of the system shall be hosted on AWS Amplify	Must	
IMR005	The backend system shall use the SSL provided by AWS with auto-renewal	Must	
IMR006	The database (MongoDB) shall be hosted on MongoDB Atlas with AWS region(s)	Must	
IMR007	The app framework (React Native) shall use the bare CLI, not Expo	Must	

Interface Requirements

ID	Requirement Statement	Must/Want	Comments
INR001	The system shall use Google Maps on Android	Must	
INR002	The system shall use Apple Maps on iOS	Must	
INR003	The backend system shall be able to utilize Google Direction API to calculate distance between the user and the listed apartment	Must	
INR004	The backend system shall provide the app APIs with JSON-formatted responses	Must	
INR005	The system shall use Facebook Graph APIs to display list of your friends who are also using the app	Want	
INR006	The system shall be able to integrate with PayPal for payment purposes	Must	
INR007	The system shall integrate with OU's SSO for authentication purposes	Must	

Supportability Requirements

ID	Requirement Statement	Must/Want	Comments
SUPR001	The Android app shall be installed via the Play Store	Must	
SUPR002	The iOS app shall be installed via the Apple Appstore	Must	
SUPR003	The Android app shall be installed via the Amazon Appstore	Want	
SUPR004	The Android app shall support minimum Android version 5.0+	Must	
SUPR005	The iOS app shall support minimum iOS version of 10.1+	Must	
SUPR006	The backend system shall be able to handle at least 5000+ requests at the same time	Must	
SUPR007	The system shall be able to be tested via Detox and Jest	Want	