



Functional Requirements		
#	Identifier	Description
1	SYS.1	The system will provide a page for each major service offered by Shuco, which are listed in their official “Services” document
2	HOM.1	The system will provide a “Home” page that has informative links, a rotating image section, and company contact information
3	HOM.2	The system will load the “Home” page by default whenever a user visits the site
4	HOM.1.1	The “Home” page’s clickable links will display their content in the main body of the page when clicked (list of titles and contents available in “Company” document)
5	HOM.1.1.2	The “Home” page will display the “About Us” section content by default when the page is first loaded
6	HOM.1.2.1	The “Home” page’s rotating image section will comprise of one image from each major service
7	HOM.1.2.2	The “Home” page will, on the first of every month, automatically select one image from each service listed in the company gallery from the most recent month to populate the image section
8	HOM.1.2.3	The system will provide a way for administrative users to override the automatic image selections
9	SYS.2	The system will provide a component “Header” with clickable links that is visible at the top of the page on every page in the system
10	SYS.2.1	The “Header” component will provide clickable links to navigate to all public pages on the site, as listed in the “System Overview” document (section 1.3.2)
11	SYS.2.1.1	Once a user has logged in, the “Header” component will display additional links specific to the user’s role, as outlined in the “System Overview” document (section 2.2.1)
12	SYS.3	The system will provide a “Footer” component at the bottom of each page
13	SYS.3.1	The “Footer” component will provide a link “Return ...” that, when clicked, will take the user back to the previous page visited
14	CON.1	The system will provide a page “Contact Form” for non verified users to submit requests to the company
15	LOG.1	The system will provide a page “Log in” that will allow a user to enter a username and password

16	LOG.2	After entering a username and password, the “Login” button will be enabled
17	LOG.3.1	After a user presses “Login”, the system will verify the entries and grant the appropriate permissions to the user
18	LOG.3.2	After the user has successfully logged in, the system will alter their view according to their user role. See the “System Roles” document for roles and their required views.
19	LOG.3.3	If the login attempt fails, the system will display the message “Incorrect username or password; Try again or contact administration” before clearing all fields.
20	LOG.4	The “Login” page will contain a link “Not a user? Create an account” next to the submit button that, when clicked, will take the user to the “Create Account” page
21	USE.1	The “Create Account” page will provide a form that will collect a user’s details as outlined in “System Roles” section 2.3.4
22	USE.2	The system will authenticate and validate the user before entering their information into the database
23	USE.3	When a user has successfully created an account, the system sends a confirmation email to that user using the provided email
24	USE.4	The system must allow users to verify their accounts via an SMS message
25	USE.4.1	The system must also provide users with the option to log in with their Google accounts if they so choose
26	LOG.5	The system must have a clickable link “I forgot my username or password” on the login screen that will allow users to reset their account password or recover their username via their verified email address

4. QUALITY ATTRIBUTES

Because this is a corporate, web based application, the stakeholders reduced the quality attribute list to the following, deeming them most important: availability, integrity, interoperability, performance, scalability, security, usability.

Attribute	Score	Availability	Integrity	Interop.	Perform.	Scalability	Security	Useability
Availability	4		<	<	<	<	^	^
Integrity	3			<	<	<	^	^
Interoperability	1				<	^	^	^
Performance	1					<	^	^
Scalability	2						^	<
Security	5							^
Useability	5							

SUMMARY OF QUALITY ATTRIBUTE DISCUSSION:

My team decided that security and usability are the two most important quality attributes of the Shuco company website. Security is critical because the application will store sensitive information, such as customer data or financial records, that could be compromised if the website is not adequately secured. A security breach can damage a company's reputation, result in financial losses, and even result in legal action. Because Shuco is a large company with traditional business needs, its reputation is of utmost importance. The company would prefer a slightly worse user experience to having to pay out large financial penalties in the event of a data breach. Emphasizing security will ensure that sensitive information remains confidential, that access to the site is restricted according to authorization, and that users can use the site without fear of their data being stolen or compromised.

The team also learned, from our interviews with executives and users, that this web application is intended to replace an old system. That old system was the source of a great deal of frustration for all users, from administrators to customers, because its poor user interface was unintuitive and unstable. An application that is not user-friendly can drive potential customers away, leading to lost sales and revenue. From our surveys, we concluded that the majority of users will be naive users. They are not experts in technology, nor do they need it for sophisticated ends. Their primary concerns are simple, day to day business actions, like setting up direct deposits, updating company information, responding to customer inquiries, etc. Meeting these needs will improve productivity and generate a significant ROI based on our modeling. For customer users, ease of navigation, clear and concise content, and intuitive design will encourage users to return, increase engagement and loyalty, and ultimately drive business revenues up. By prioritizing usability, the application will also help reduce customer support costs as users, customers and employees alike, will require less assistance in using the application. In summary, our team analyzed Shuco's needs and designed a company web

application that prioritizes security and usability above all else as it will 1) protect privacy and therefore Shuco from litigation and 2) drive/support business growth and success.

Top 3 Attributes: Security, Useability, and Availability Non Functional Requirements:		
#	Identifier	Description
1	QUA.1	Access to the system must be secured according to industry standard best practices, such as via O-Auth 2 tokens and multi-factor authentication, to ensure that only authorized users can access sensitive data and functionalities within the system according to their assigned authorities
2	QUA.2	The system interface must be designed with user-centered principles for non technical users such that on average a user may be able to use 95% of their allowed system functionality (See "Authorities" document pg 32) after 4 hours of training.
3	QUA.3	The application shall be at least 97 percent available on weekdays between 5:00 A.M and 11:00 P.M. CDT, and at least 99 percent available on weekdays between 1:00 P.M. and 3:00 P.M. CDT