

User Requirements: “outline definitions of important characteristics of system focused on UI operations

- Input username
- Create password
- Input password
- Recover password
- Maybe email
- Area for picture selection on register
- Area for password image input

System Requirements: “detailed description of systems functionality, services, operational constraints”

- Should have image database
- Should have users + passwords database
- Should have firewall for password security
- Should be able to authenticate Usernames and Passwords
- Should be able to prevent duplicate usernames
- Should be able to prevent duplicate emails
- Should require security for account recovery (SQs or emails)
- Should randomly select images to display + user's images
- Could allow pictures to be used multiple times
- Could allow for variable password lengths (not hard stopped at 4)
- Could allow for cosmetic changes, pandering to other websites in need of login

Risk Analysis: “Identify 3 risk situations and possible mitigation actions. These adversely affect the projects success”

- Security
 - Encryption of passwords could be interesting with images
 - Recovery could cause interesting situations with storing passwords and recovery information separate (stop all personal info from being leaked if access to UN and PW data compromised)
- New to React
 - Learning how to use
- Firebase/firestore
 - Learning how to use
- Password combinations and display options (Too many images, not enough shown, could give away some password parts)
 - soft caps potential images
- The software is meant to be something widely available for websites to use as login systems, so compatibility with other systems and potentially legacy systems could cause issues
 - Testing with other system

