



Software Project Management: Graphical Password Strategy

SOFE: Software Project Management

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Project Description:

User authentication is critical in securing a users account in terms of security. However the alphanumeric system that is still used today fails to provide adequate security to the user, as the passwords require to be hard to guess as well as easy to remember. This often requires the user to write down their password which poses a direct threat, or have to choose a simpler password which presents an opportunity for brute-force attacks, or just for an individual to simply guess your password. There have been many proposed solutions for the problem, one of them being the use of graphical passwords. In this case, there will be three sets of picture combinations. Users will be able to select a set number of images from a group of images, and selecting the right images in the right order, three times will unlock the device. In theory, graphical passwords are easier to remember as humans as we remember images better than words.

Project Objectives:

1. Create a fully functional Graphical Password that works with only the correct images and sequence determined by the user
2. Show a certain amount of images determined by the user when deciding password, limit of 100 images.
3. Let the user input the correct order of images to select.
4. Allow users to upload their own images or choose a category of images to create a password.
5. Option of having one password for all accounts.

Measures of Success:

Measures of success would include:

1. The system has a working database that stores password sequences and matches them to the correct users.
2. Security breaches very rarely happen, meaning that the security is strong.
3. Customers give positive feedback, showing that they are satisfied with the product.
4. Bugs or issues with the systems rarely happen.
5. The project deadline was reached and we did not go over the estimated budget.

Project Infrastructure:

1. The passwords will be saved on a local server instead of a cloud server to lower the chances of a breach of security.
2. A server to save all the pictures that are being used.
3. An algorithm that can recognize and compare picture combinations.
4. A web application that the users will use to access the servers.