

# Design Document - Password reset

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The functional feature is to allow the user to reset his/her password. On sign up a user needs to enter a security question and provide an answer to the question. The question will be used as a security feature to allow the user to enter a new password. The feature will use the USERS database table to retrieve and as well set a new password. The desired sequence of pages is as follows (inorder):

- Forgot Password?
- Enter User Name
- Answer The Question
- Reset Password
- Back to Login

The feature is a perfect fit to the application since it is a handy option if a user forgets his/her password.

## Package/Interface Details

The feature is implemented with the following files and code snippets in files:-

- Templates - In the templates folder, the files `security.html`, `question.html` and `enter_password.html` where designed for the feature. They all extent the homepage and they use the same css file.
- Sqlite database - the feature uses the `flaskr.db` and inside the db it uses the USERS table to be more specific.
- flaskr.py - The file contains three main methods used by the feature. The methods developed are `security()`, `question()` and `newPassword()` they are to handle GET/POST requests from the client and reply or send back the required documents and information.
- passwordReset.py - The file is an interface module implimented to help co developers and making a boundary between the `flaskr.py` file and the data retrieval and passing to the database. The interface handles data transfer with the database while the other `flaskr.py` handles transfer of request with the server. The interface contains the following methods: `getUserInfo()` and `setPassword()` as well as some functions to connect to the database. The main separation and boundary between the two files is database interaction, making it easy for other developers to be able to import the interface and use it as well.

The files above also depend on each other as illustrated in the diagram.

## Usage

To use the package, firstly we insure that there is at least an entry in the USERS database schema, this is also handle by an initial user who is added to the database on initialization. The database should be initialized trough the initialization of the `schema.py` using sqlite3. The initial user has the following infomation:

username: mark

password: password

question: Whats your Name

answer: mark

The above information can be used to login or test the password reset.

When the files defined in the package section above are ready we can use the feature through running the flask program.

Insure the template files are in the `templates` directory and that the `flaskr.py` and the `passwordReset.py` are in the same directory according to the flask directory layout.