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150630D

1. This is a java application. Developed to demonstrate how to give more security in authentication.
2. Application uses keystroke dynamics as biometrics property.
3. When user try to signup using this application, user needs to perform a typing training on SIGN UP PAGE. When user type inside the training section all the FLYTIMES(time between two key type) and STAYTIMES(time between one key pressed and released) will be saved by the application
4.

	A	B	C	D	………………
A	23.35			33.35	
B	..	..			
C	11.5				
D			35.90		
. . . .					

Application will arrange the FLYTIMES like above array when while training. For example, word DAACD will affect the array, as shown above. When user type second letter A the letter before it (D) will affect the specific fly time(in this case 33.35 secs).

5.

	END	A	B	C	D	……………….
A		10.11		17.90		
B	..	..				
C					12.35	
D	12.32	15.23				
. . . .						

Application uses an array as above to store STAYTIMES. The END column is designed to get more information about the user keystroke dynamics. When user type DAACD the key pressing time (stay time) will be affected by the next letter that is going to be pressed. So, the first letter D's pressing time is depend on letter A (second letter). In this way the final letter has no other letters to type and it will make a different affect on pressing time regarding to different users.

6. Application will ask user to type several words to type. This application only considers about 26 lowercase letters. If user type any other keys while typing a word application will clear the data about that specific word and user want to type that word again.

7. When all the words are typed user can sign up. When sign in process application ask for a keystroke typing and it will listen to the keystrokes and compare time difference between specific array elements and at the final application will come up with a average deviation that signInUser made. If average FLYTIME deviation is less than 60 ms and STAYTIME deviation less than 40 ms application will allow the user to login.

8. Application uses SQLite database to stroke relevant information about the user details and to handle multiple user data. When run the application maybe you want to import sqlite_jdbc to the libraries.