



AuthentiKey: **Keyboard Biometrics**

Who we are

Team: Not Our (Seg)Fault

Members: Alex Wein, Clara Frausto, Ashlynn Cardoso, William Bennett,
Caitlin Scarberry

Mentors: Alec Harrell, Renato Untalan

1

Problem Description

Current biometric based MFA is clumsy



Current MFA

- Multifactor Authentication is widely used
- Biometrics is one approach to MFA
- The current state of biometric based MFA is lacking

Problem Solution

Keyboards: ubiquitous and easy



Introducing

Keyboard Biometrics



Proposed Solution to MFA

Keyboard Biometrics are **Lightweight**

No need for extra device or interface

Keyboard Biometrics are **Unique**

No sacrifice is made in switching to keyboard based biometrics

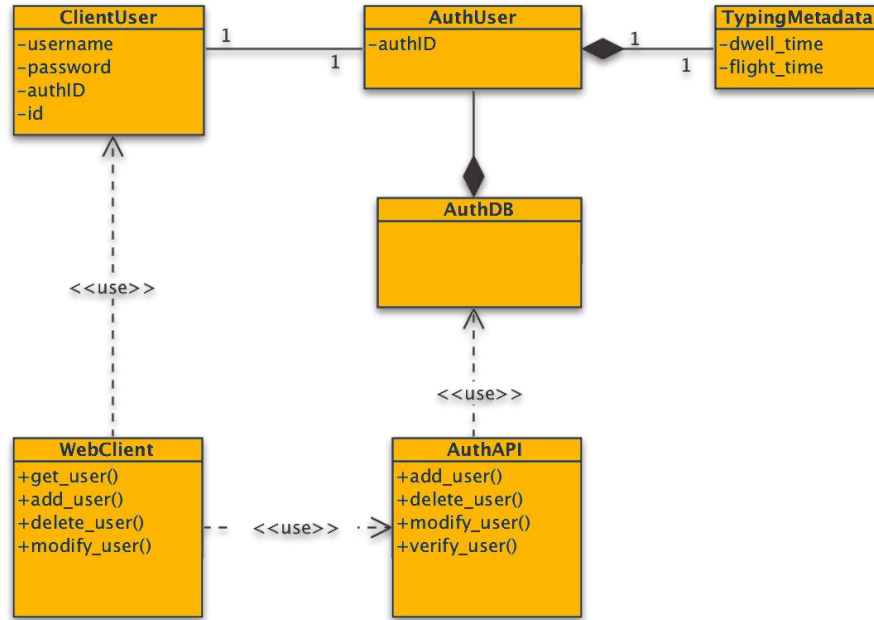
3

System Description

Verification and Log-In Integration



How it all works:



System Level Diagram



Main Features & Functionality

User Training

Users create their template by typing a phrase multiple times

User Validation

When logging in, users are prompted to type a short sentence, which is validated against past data

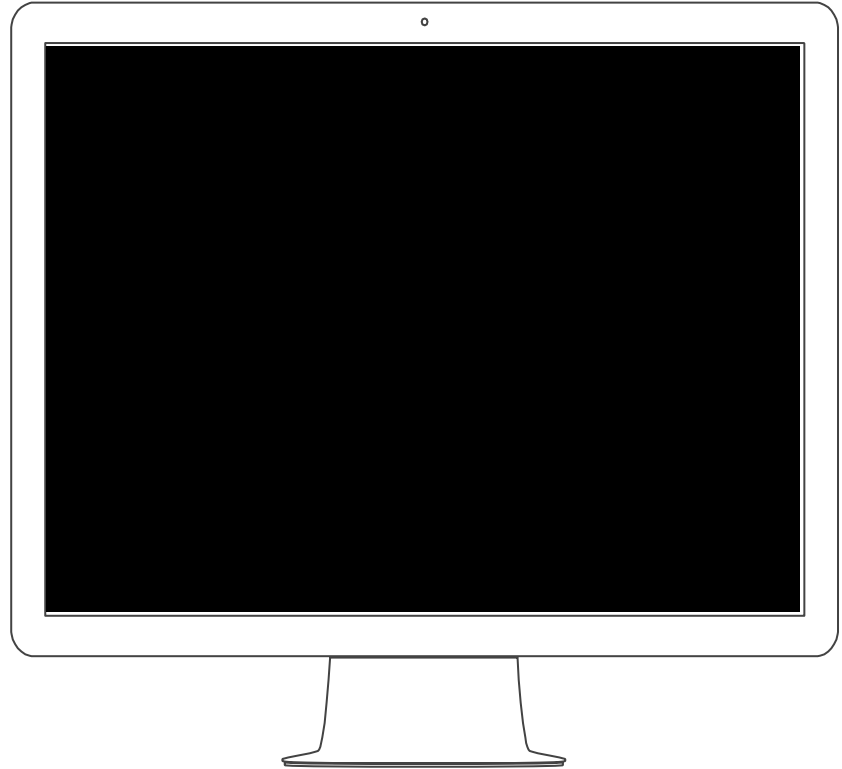
User Updating

Users templates can be updated to account for changing typing style



It's Demo Time

Demo Of AuthentiKey



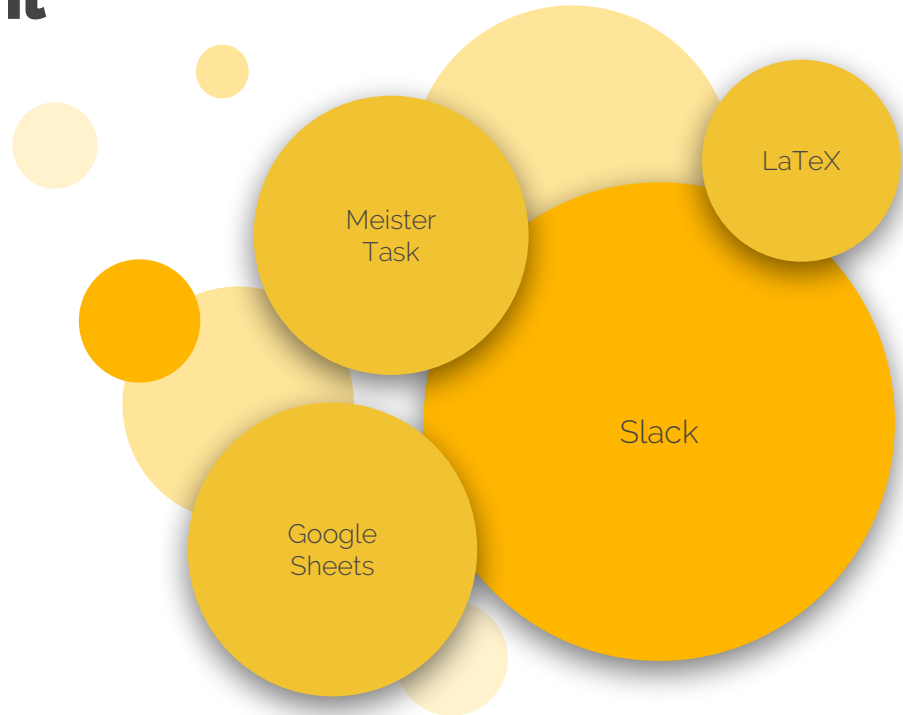
4

Design Practices

Workflow and Coordination

Workflow Management

- Slack for communication
- Meister Task for Task Management
- Google Sheets for burndown
- Google Docs and ShareLaTeX for collaborative document editing



LaTeX

Meister
Task

Slack

Google
Sheets



Communication & Coordination



aharrell 4:05 PM

In office or over phone call today?



Ashlynn 4:05 PM

in office



Alex Wein 4:05 PM

But only if the dog is there



renato 4:05 PM

lol



aharrell 4:06 PM

👍 haha she might b there

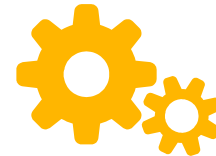


- We communicate regularly over Slack with our mentors
- We meet twice a week in person usually
- The office has a dog

5

Conclusion

Where we are & where we're going



AuthentiKey

Progress



Initial Design

Login/Registration flow is implemented



Machine Learning

Machine Learning Backend is fleshed out



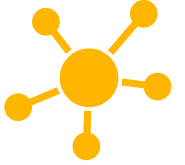
Full Security

AuthentiKey stores data securely



Portable to Any Interface

AuthentiKey is agnostic of the interface and can be used in any context.



In Conclusion

- Multifactor Authentication is widely used
- Current biometric solutions to MFA are a bit lacking
- AuthentiKey provides a robust and easy solution
- System Security is still maintained



Thanks!

Any questions?