

A photograph of a traditional Chinese temple at night, illuminated by warm lights. The temple has ornate, multi-tiered roofs with decorative elements and is surrounded by snow-covered trees and a courtyard. The scene is dark, with the lights from the temple providing the primary illumination.

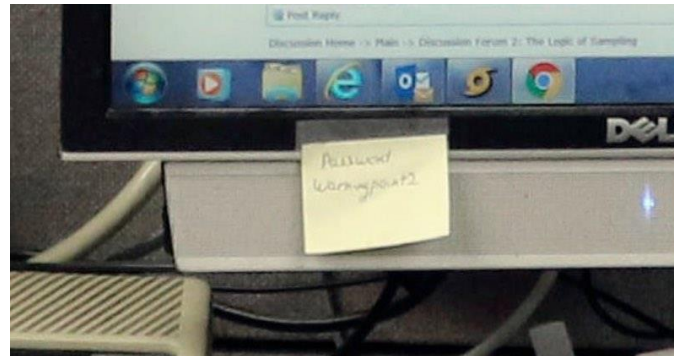
2 Factor Authentication

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Multi-factor Authentication

- › Multi-factor Authentication (MFA) is a way to increase the security of user authentication
- › The most commonly used MFA is Single-Factor Authentication

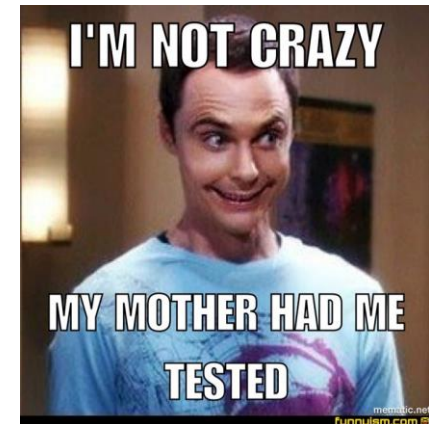
- › Username & Password



- › If your password is guessed then your account is compromised.

Multi-factor Authentication

- To increase security we can use more than one factor
- Commonly used factors
 - Something you know (password)
 - Something you have (mobile phone)
 - Something you are (being crazy doesn't count)
- Most used is 2-factor authentication.
- The best example is withdrawing money from an ATM
 - You **HAVE** a bank card
 - You **KNOW** your pincode



2-Factor in our applications

- How can we use this in our applications?
- After the normal login with username and password
- We ask the user for an additional verification code
 - This code can be sent by text message to a mobile phone
 - This code can be generated by an authenticator app
- Examples of authenticator apps are
 - Google Authenticator
 - Microsoft Authenticator
 - Authy

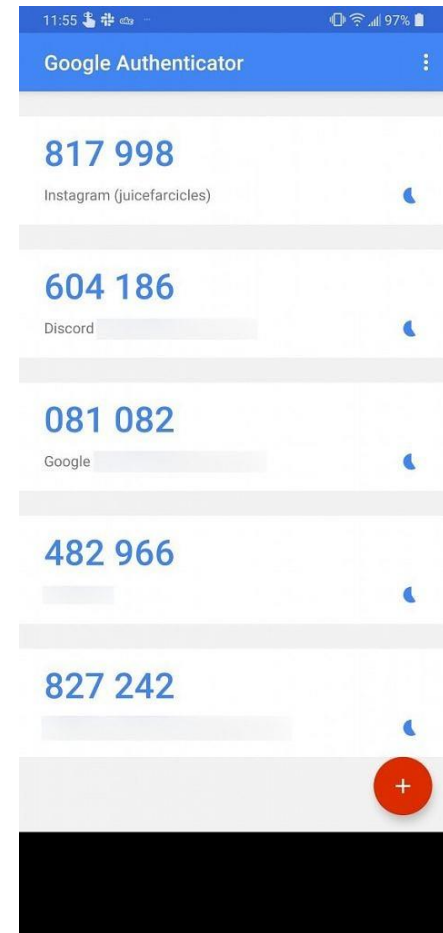
2-Factor in our application

- In the Plato sample application 2FA is provided with a random generated pincode sent by text message
- I created a sample based on the standard WebOrder workspace that uses either a text message or an authenticator app.
- After entering username and password the user can choose to login with a text message or with an authenticator app.

How does it work?

- Enter username & password
- Ask for a 6 digit verification code
- Generate the code on the server side
- Compare with the code the user has entered

- But... How do the Authenticator app and your application know how to generate a similar code?



Connect an authenticator app

- Provide a link or button the user can click on to start the connection process.
- An email will be sent to the user with a link that will take the user to a connection 'wizard'
- This wizard will present the user with a QR code that can be scanned with the authenticator app.



Your code

Demonstration

- Standard Web Order sample
 - [WebOrder 20](#)
- Web Order sample with 2FA
 - [WebOrder 20 Scanduc](#)
- Link the connection wizard
 - [WebOrder 20 Scanduc Connection Wizard](#)



Thank you!
Are there any questions?