## Module 3

- 1. Authentication Technologies
- 2. Design Flaws in Authentication Mechanisms
  - a. Bad Passwords
    - i. Discussion
    - ii. Example
  - b. Brute-Forcible Login
    - i. Discussion
    - ii. Example
  - c. Verbose Failure Messages
    - i. Discussion
    - ii. Example
  - d. Vulnerable Transmission of Credentials
    - i. Discussion
    - ii. Example
  - e. Password Change Functionality
    - i. Discussion
    - ii. Example
  - f. Forgotten Password Functionality
    - i. Discussion
    - ii. Example
  - g. "Remember Me" Functionality
    - i. Discussion
    - ii. Example
  - h. User Impersonation Functionality
    - i. Discussion
    - ii. Example
  - i. Incomplete Validation of Credentials
    - i. Discussion
    - ii. Example
  - j. Nonunique Usernames
    - i. Discussion
    - ii. Example
  - k. Predictable Usernames
    - i. Discussion
    - ii. Example

- 1. Predictable Initial Passwords
  - i. Discussion
  - ii. Example
- m. Insecure Distribution of Credentials
  - i. Discussion
  - ii. Example
- 3. Password cracking tools
  - i. Discussion
  - ii. Example