

Software Testing

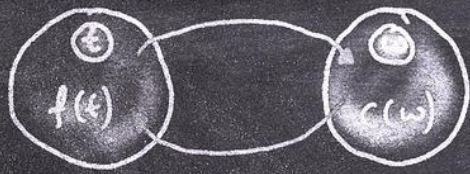
An overview of common types of software testing



Unit Testing

01 Ensuring they function correctly in isolation

02 Testing individual components or modules

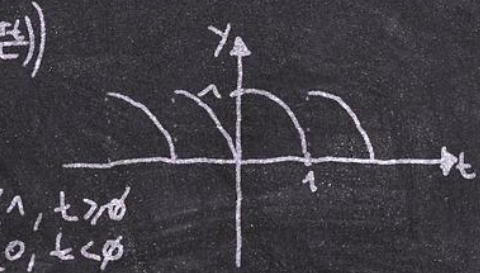


$$\sin(\omega t)$$

$$a(\omega) = \frac{1}{\pi}$$

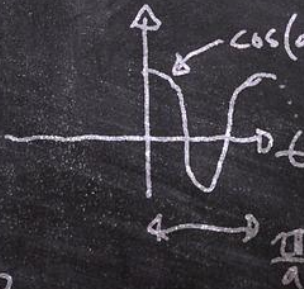
$$c_n = \frac{1}{2L} \int_{-L}^L f(t) e^{-jn\pi t/L} dt \quad b(\omega) = \frac{1}{\pi}$$

$$f(t) = \sum_{n=-\infty}^{\infty} c_n \cdot e^{jn\pi t/L} \quad C(\omega) = \int_{-\infty}^{\infty} f(t)$$



$1, t > 0$
 $0, t < 0$

$$f(t) = \frac{1}{2\pi} \int_{-\infty}^{\infty}$$



$$a \cdot \hat{g}(\omega) + b \cdot \hat{g}(\omega), \quad a, b \in \mathbb{R}$$

$$a \cdot \hat{g}(\omega) + b(\omega) \cdot \sin(\omega t) d\omega$$

Integration Testing

- Testing the combined units or modules
- Verifying they work together as expected

System Testing

01 Validating it meets specified requirements

02 Testing the entire system as a whole





Acceptance Testing

- 01 Ensuring it satisfies business requirements
- 02 Determining if the software meets acceptance criteria

Thank you for your time 😊