Software Requirements & Specifications

# Overview

* Something that a piece of software is expected to do.
  + Functional requirements (a function or a task)
    - User is able to input data
    - System must sort user data
    - User can search order history
  + Non-Functional Requirements (behaviour of the software)
    - User-friendly
    - A history search takes less than 3 seconds
  + Constraints (which restricts the design)
    - Server must run on Linux
    - Database must be NoSQL
    - Server must be implemented using C++

- Sometimes, requirement is either functional or non-functional: like security

# Stories

* Behaviour Driven Dev features Stories
* Three elements: Given(Context), When(Event), Then(outcome)
  + Scenario 1: Account has enough fund

**Given** the account balance is $100

**And** the card is valid

**And** the machine contains enough money

**When** the Account Holder requests $20

**Then** the ATM should dispense $20

**And** the account balance should be $80

**And** the card should be returned

* + Scenario 2: Account does not have enough fund

**Given** the account balance is $100

**And** the card is valid

**And** the machine contains enough money

**When** the Account Holder requests $20

**Then** the ATM should dispense $20

**And** the account balance should be $80

**And** the card should be returned

# Specification

* describe how the product works from user’s perspective
* tips
  + Write simply
  + Review & Rewrite
  + Avoid Templates