COMP1531

Week 2 Tutorial!

Software Development Life Cycle (SDLC)

Software Dev Life Cycle

Requirements Analysis	→	Design	→	Implementation	→	Testing
Use case diagrams, User Stories...		Architecture, UML, language...		**CODEY CODE!!**		Unit, integration, UAT...
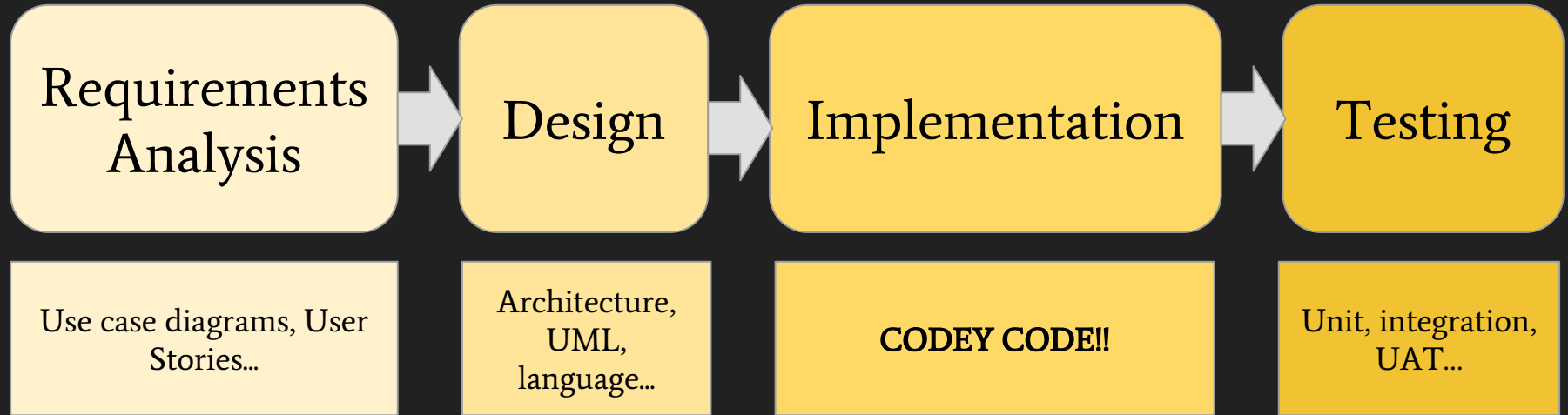
Agile vs Waterfall

Agile

Incremental & iterative process

Emphasizes delivering software in increments - where software is delivered in short cycles/iterations

Testing software as it is built

Seeking continuous feedback from the customer at the end of each iteration & adapting software based on feedback

Waterfall

Waterfall is a sequential process

Each phase must be fully completed, documented & signed off before moving onto the next phase

Suitable for **high risk** and/or **high cost** projects

User Stories

First Epic User stories

- As a <role>, I want to do <A>, <B> and <C>

User stories

- Bridge between customer and engineers
- Clear, concise "stories" about what the customer wants

RGB

One technique is to follow the role-goal-benefit (RGB) or role-feature-reason technique - proposed by Mike Kohan of Mountain Goat Software.

"As a [type of user], I want some [feature] so that [some reason]"

Allows us to focus on who, what & why.

Example of RGB

• As a librarian, I want to have facility of searching a book by different criteria so that I will save time to serve a customer

• As a student, I want to be reminded of my class schedule every morning

• As a lawyer, I want to see all my active cases on the main screen

Scenario

A waiter inputs orders from a diner into the system.

An order can include an order for food and an order for drinks.

Food orders are sent to the kitchen staff, while drink orders are sent to the bar.

A waiter can check on the status of the food or drink order at any time.

The bar staff updates the status on the system when the drinks are ready to served.

The kitchen staff updates the system when the food ordered has been prepared.

At the end of a meal, a waiter can request the system to print the bill.

A waiter collects payment from the diner and can optionally print the bill during the payment.

The system logs each order and payment from a diner.

If a diner is not pleased with the order, they can refuse to make the payment. The discount must be authorised by the manager.

The system records orders with such special discounts.

A manager can view the log statistics any-time to see a record of orders and payments made.

Epic User stories

Epic User stories

Epic Story: **As a waiter**, I should be able to view the current menu options and place a new table order for a diner

Epic Story: **As a manager**, I should be able to perform a number of administrative functions such as being able to add and delete items from the menu stored in the system to ensure that the menu-options in the system are current as the menu in the restaurant is periodically changed. I should also be able to authorise discounts for the table orders.

Epic Story: **As a chef**, I should be able to view the current queue of orders, be able to accept the orders and update the order status to be ready once the order is prepared

User Stories

Break the Epic US

US1: As a waiter, I should be able to view the current menu-options, so that I can advise the diner of the current menu-choices in the restaurant

US2: As a waiter, I should be able to add a new table order into the system, so that I am able to serve a diner.

and more...

Acceptance Criteria

US 1

US1: As a waiter, I should be able to view the current menu-options, so that I can advise the diner of the current menu-choices in the restaurant

Acceptance Criteria:

1. Should be able to view each menu-item, its current availability status and its price
2. Should be able to click on the menu-item and see a description of the dish and its ingredients
3. Should be able to click on the menu-item and see if it is "nut-free", "gluten-free", vegan

Example

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