First, a Quick Review!

Class Responsibility Collaborator (CRC) Models

Each CRC card in a CRC model will detail:

- A **Class**

  - The name of the class

  - Information on any superclasses

- A **Responsibility**

  - What the class does

- **Collaborations**

  - Relationship to other classes

  - Any dependencies. What other classes does this class use?

Class Responsibility Collaborator (CRC) Card

These are some examples of CRC cards for a blogging application.

These cards detail Classes, Responsibilities and Collaborations in proposed software.

User	
Knows its username and password. Knows its posts	Post

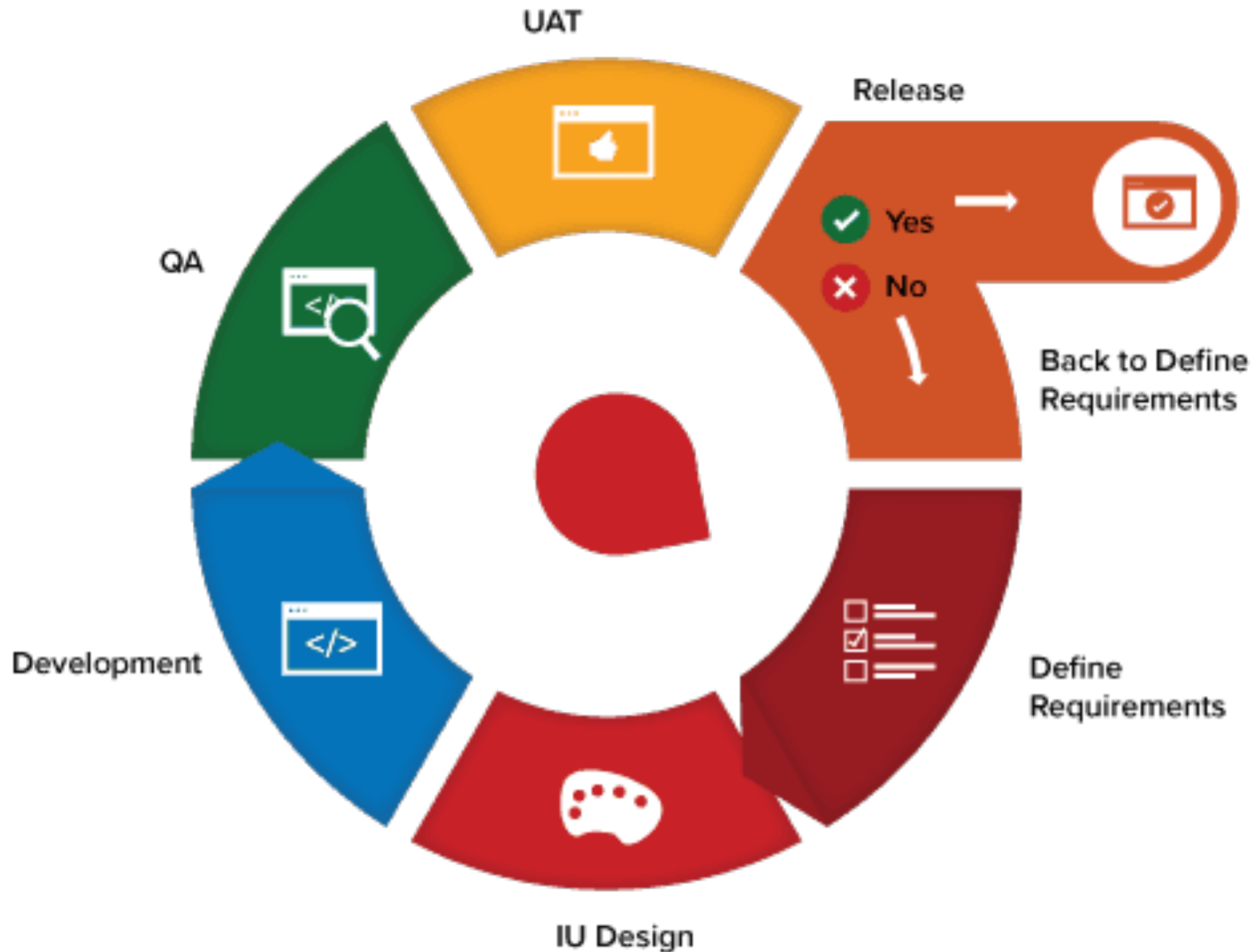| Post	
Has an identifier. Knows its image-link and a title. Knows its posting user.	User

Agile Development

What does it mean for a software development process to be …. Agile?

The Agile Manifesto

"We value:

– Individuals and interactions over processes and tools

– Working software over comprehensive documentation

– Customer collaboration over contract negotiation

– Responding to change over following a plan"

https://agilemanifesto.org/

Agile Process Illustrated

Defining User Stories

What is the syntax we use to describe a requirement, or User Story?

Making Better User Stories: A11yAC

There are two methods for including accessibility in your user stories and acceptance criteria:

1. **Create accessibility acceptance criteria** (A11yAC) based on existing user stories that do not focus on accessibility.

2. **Write tailored user stories** to cover a variety of users with differing accessibility needs.

When you write user stories, many abilities should be represented and considered.

But remember, even people with the same physical abilities may want use technology differently.

Based on *Indiana University's University Information Technology Services*

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Example: A11yAC added to user story

User Story: As a user who is receiving search results, I want to know how many results there are so that I can change my search terms if needed.

A11yAC

- Search, filters, and results can be navigated using keyboard only.
- User is aware when results appear if using a screen reader.
- User is aware of the number of results if using a screen reader.
- User is aware when results appear if using screen magnification.
- User is aware of the number of results if using screen magnification.
- Text should have a contrast ratio of at least 4.5:1.

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Example: A11yAC added to user story

User Story: As a non-sighted screen reader user, I need the image of the room to include descriptive alt text, so that my screen reader can communicate the information I need to navigate through the adventure.

A11yAC

- Image supports screen magnification.
- Descriptive "alt" text is audible when mouse hovers over image
- Image includes audible Accessible Role that interfaces with JAWS screenreader

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Activity Time!

- Form a group with 4 of your peers. Imagine that you are a software team!

- Review the **ATM user stories** that you have been provided, and revise them to include **A11yAC**.

- Then, create a set **CRC** (class responsibility collaborator) cards for the system. You may want to use **nouns** in the user stories to identify candidate objects, and **verbs** to identify candidate methods.

- When your group is satisfied with the card set, place them all on a desktop.

- Then, walk through each user stories above in light of your CRC model and:

  - Trace the control flow required to realize each user story. Do the responsibilities of the cards satisfy the requirements of the user story?

  - If not, modify your card deck to accommodate the requirements of the user story.

  - Repeat until you have a stable card deck!!