Agile @ King's

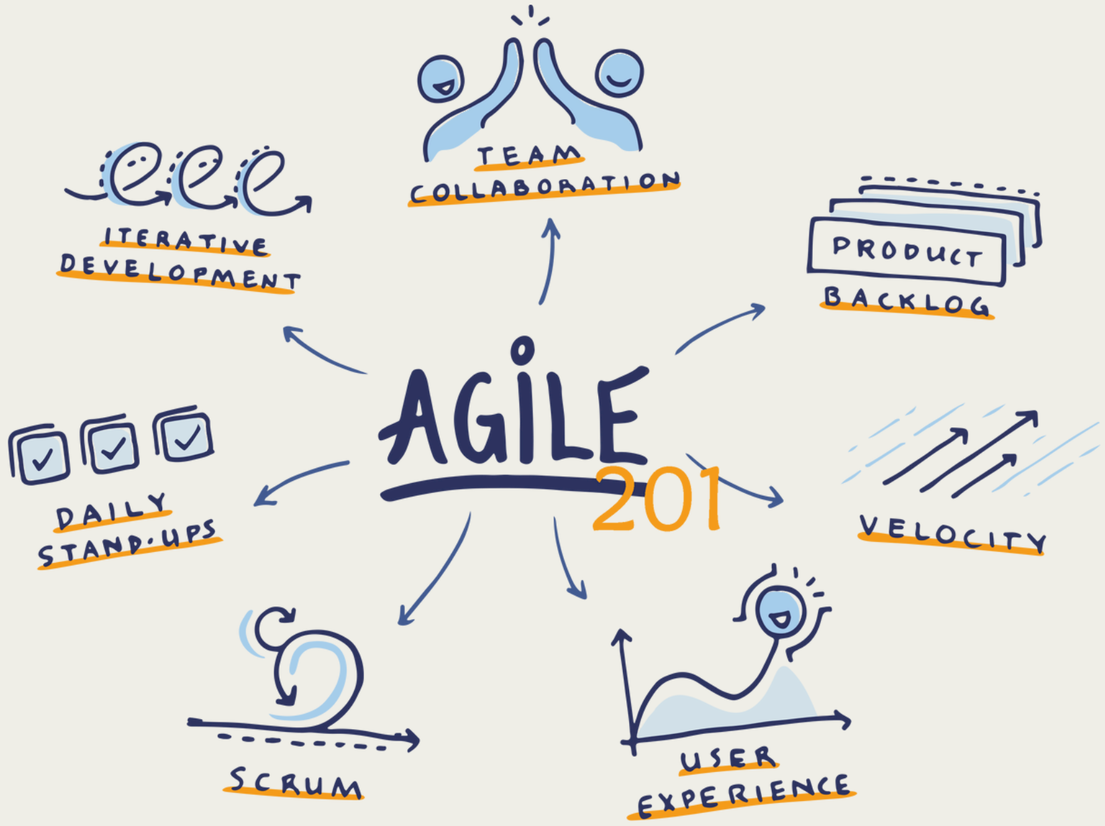
MARKBOOK

Presley Liauw

THE KING'S SCHOOL

AGENDA

- What is Agile?
- Project Overview
- Pre-Project
  - Epic Creation
  - User Story Creation
  - Backlog Creation
  - System Mockups, Internal Review & Acceptance Criteria
- Feasibility
  - Solution Design & Approval
- Development Sprint
  - Prioritise
  - Groom, Build, Test & Accept
  - Sprint Planning, Management & Reporting
  - Deployment
  - Release Demonstration
  - Post Project



WHAT IS THE AGILE METHODOLOGY?

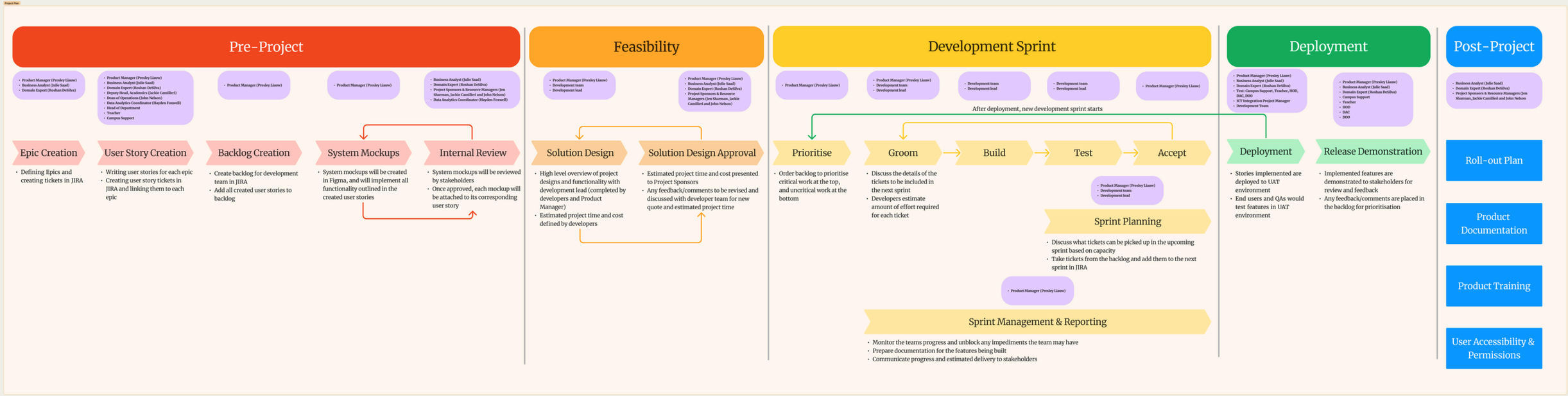
“The Agile methodology is a project management approach that involves breaking the project into phases and emphasises continuous collaboration and improvement. Teams follow a cycle of planning, executing, and evaluating.” ~ Atlassian

https://www.atlassian.com/agile

PROJECT OVERVIEW

The Product Development Cycle outlined below enhances the Agile Methodology by consistently preparing well-designed, highly valuable, and prioritised features for seamless implementation.

The next slide will cover the critical definitions, and how it applies to the process below.



CRITICAL DEFINITIONS



Example
Building a House



Epic

A large body of work that drives towards a specific goal.

When building a house, you need to first build the foundation, put up the frames and attach the roof. Each of these phases would act as the epics for the house.

User Story

Short requirements or requests written from the perspective of an end user.

To build the foundation for the house, you would need to dig a trench, lay the rebar, mix the concrete, and pour the concrete. These are the tasks or user stories under the 'foundation' epic.

Acceptance Criteria

The conditions that must be satisfied for a user story to be considered as 'done'.

The AC for the pouring of concrete would be to ensure the right concrete was used, it passed compliance checks, and was allowed to cure. These AC's would have to be met before you can tick off the user story of 'pouring concrete'.

PRE-PROJECT

- An epic can **encompass multiple teams**, and can be broken down into a number of smaller stories or tasks.
- As a part of this step, epics would be defined in order to document and understand the large pieces of work which would need to be completed as a part of the project.
- These epics would be documented and created as epics on *Jira*, to allow the corresponding stories to be created under the epics in Jira.

Epic Creation

- Defining Epics and creating tickets in JIRA

User Story Creation

- Writing user stories for each epic
- Creating user story tickets in JIRA and linking them to each epic

Backlog Creation

- Create backlog for development team in JIRA
- Add all created user stories to backlog

System Mockups

- System mockups will be created in Figma, and will implement all functionality outlined in the created user stories

Internal Review

- System mockups will be reviewed by stakeholders
- Once approved, each mockup will be attached to its corresponding user story

PRE-PROJECT

- As a part of the user story creation step, the user stories will be formatted in the following:

“As a [end-user], I want [intention], so that [end goal].”

- The goal of these stories is to define the smallest unit of work for the software feature in a way that ensures that we are fulfilling the needs of the end user.
- These user stories will be created as tickets in Jira and linked to its corresponding epic.

- A **backlog** is the list of user stories which the development team have not yet started or completed.
- This backlog is prioritised so that the item at the top of the backlog is the most important, and the bottom being the least.
- The backlog will be created in Jira to contain the user story tickets.

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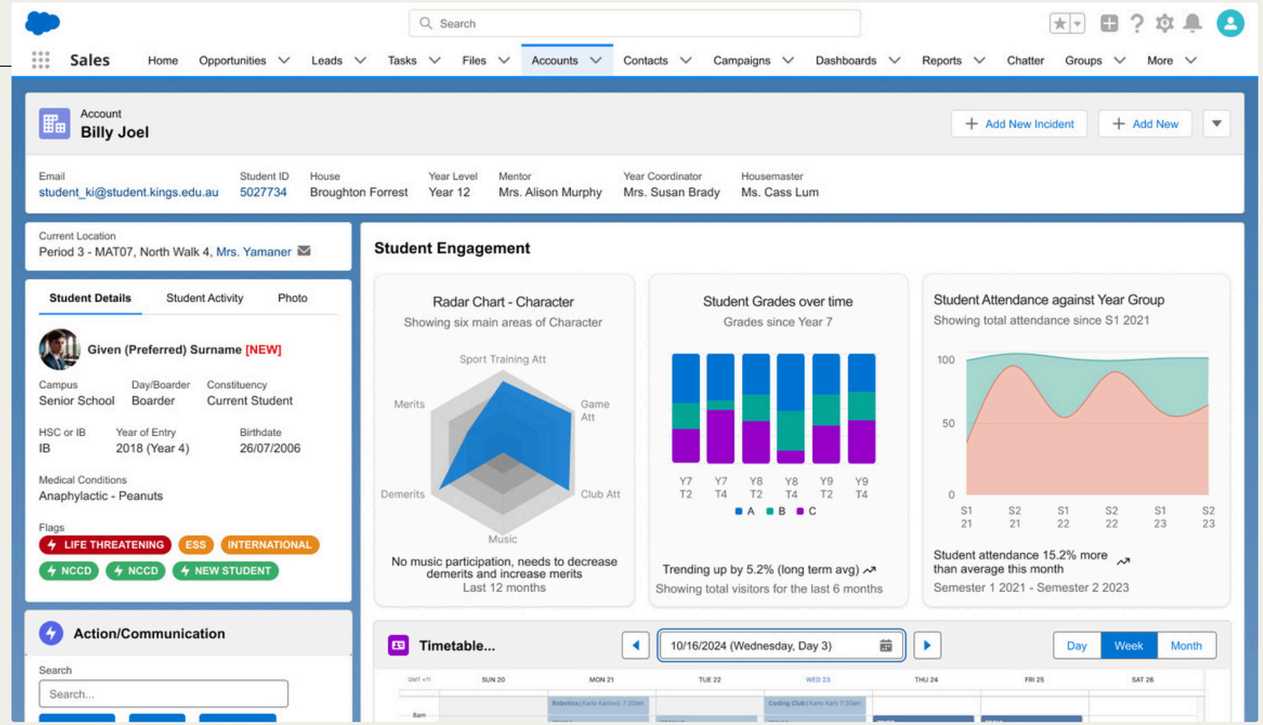
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PRE-PROJECT

- Mockups are designs of what the system will look like to the user.
- The mockups will include all the functionality outlined by the defined user stories in the previous step.

- Mockups will be created in Figma by the Product Manager, and will be iteratively approved by the Project Sponsor and Domain Expert.



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PRE-PROJECT

- Acceptance Criteria (AC) provide details on the **expected system behaviour** and how it will fulfil the user story.
- The ACs will be based on the system mockups approved in the previous step. The ACs will be formatted in the following:

Given [prerequisites for the criteria]
When [action or trigger]
Then [result or outcome]

- The definition of the ACs:
  - Provides a clear way to test functionality
  - Ensures that all pre-conditions are accounted for
  - Determines if a requirement has been fulfilled.

- The Acs will be written alongside the completed and approved mockups in this step.

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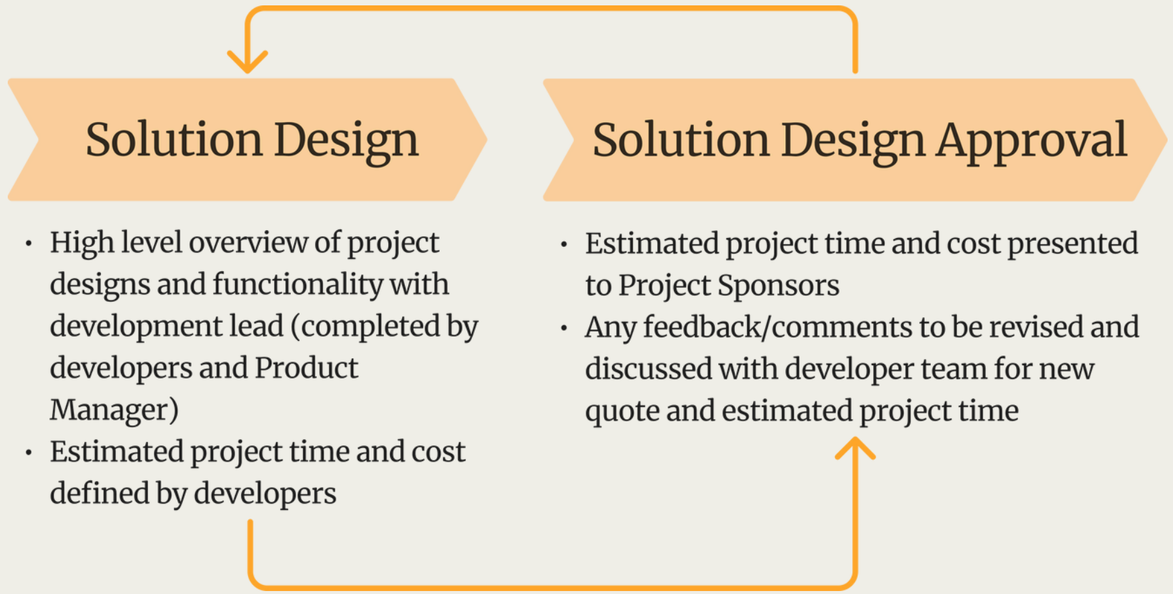
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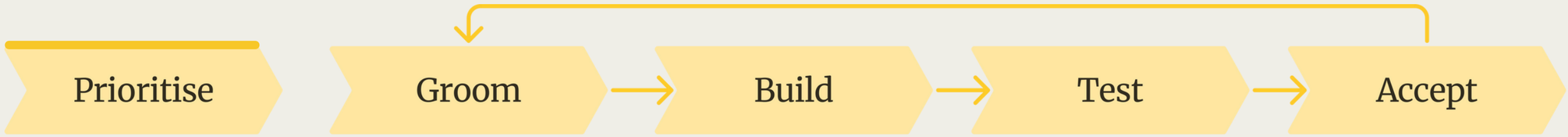
FEASIBILITY

- The Product Manager and development lead review project designs and functionality **at a high level**.
- Developers are able to give an estimate regarding the time and cost, which is presented to Project Sponsors.
- Any feedback is discussed with the developer team for adjustments to the estimate.
- **Please note this is all at a high level, and technical details about implementation will only be touched on lightly, if at all.**



DEVELOPMENT SPRINT

- During this step, the user stories created in Jira must be prioritised in the developer backlog in a way that accounts for their dependencies and their importance in creating a usable, viable platform.



- Order backlog to prioritise critical work at the top, and uncritical work at the bottom

- Discuss the details of the tickets to be included in the next sprint
- Developers estimate amount of effort required for each ticket

Sprint Planning

- Discuss what tickets can be picked up in the upcoming sprint based on capacity
- Take tickets from the backlog and add them to the next sprint in JIRA

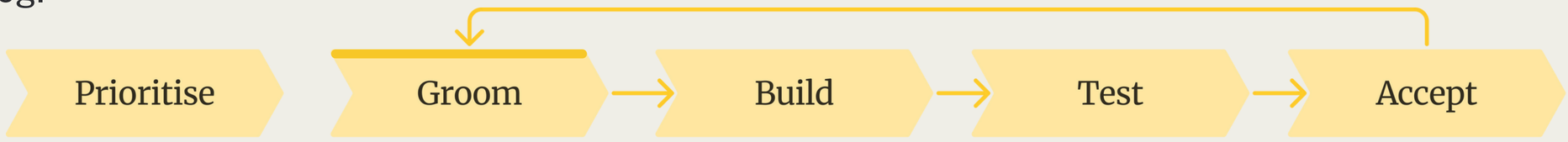
Sprint Management & Reporting

- Monitor the teams progress and unblock any impediments the team may have
- Prepare documentation for the features being built
- Communicate progress and estimated delivery to stakeholders

DEVELOPMENT SPRINT

- A **grooming session** is a collaborative session which allows the product manager and developers to discuss the requirements outlined in the user stories, ACs, and mockups.
- Once all questions are answered, the developers will then **provide an estimation of the work** to complete the user story.
- Once estimated, the work would then be **prioritised based on any dependencies**, and the **overall importance of the work** within the project.

Grooming sessions will be held on a weekly basis, to ensure that the development team has enough work in their backlog.



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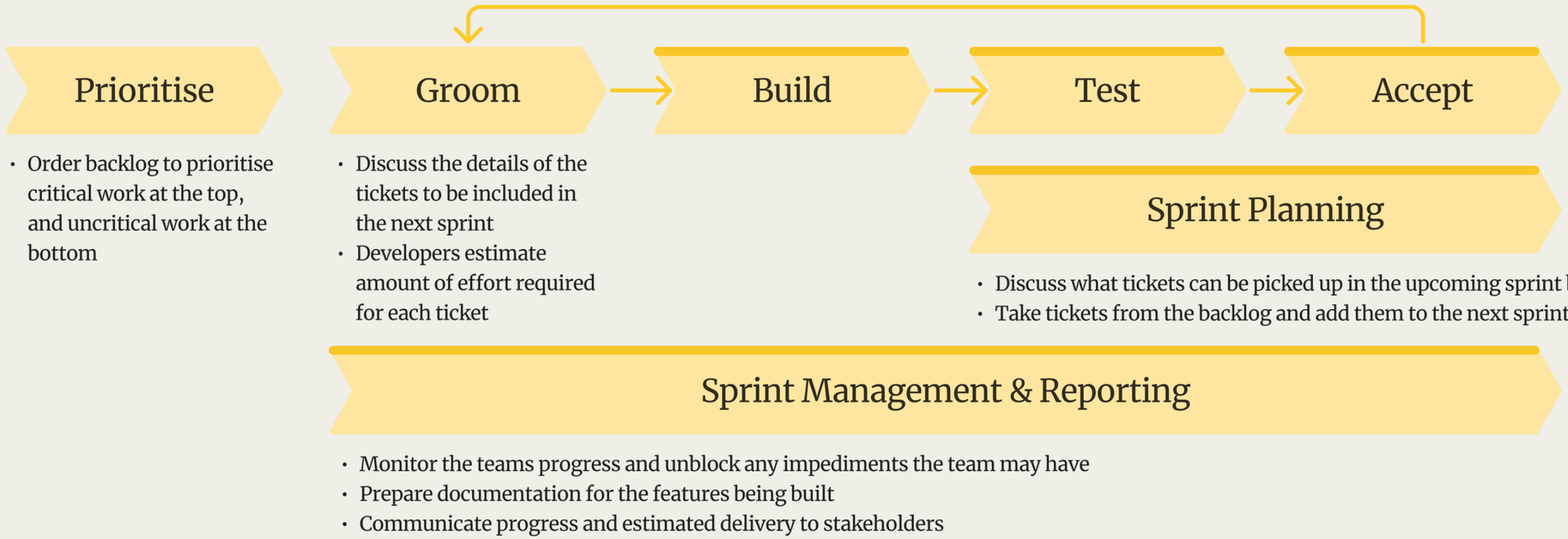
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DEVELOPMENT SPRINT

- A **sprint** is a short, time-boxed period when a team works to complete a set amount of work. The sprints in this project will be 2 weeks long (10 business days)

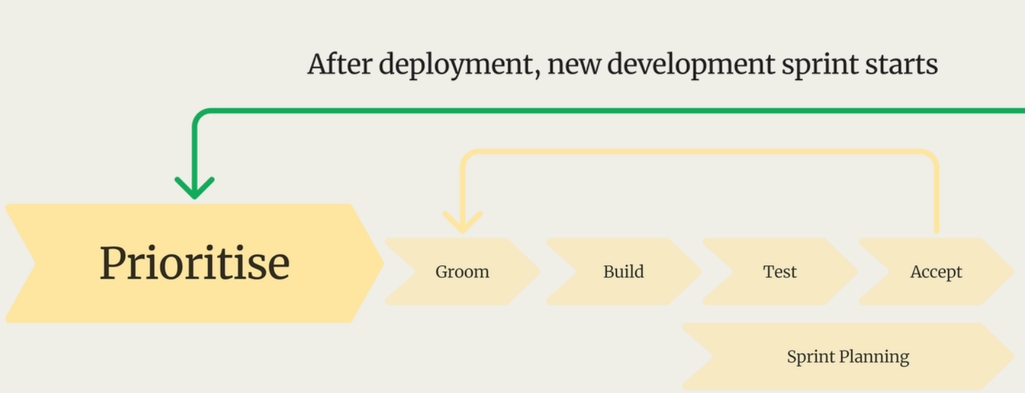
- The sprint planning is a session with the product manager and developer team to answer the following questions:
  - What work can get done in the upcoming sprint?
  - What work will we do in the upcoming sprint?

- The above questions will be based on the prioritised backlog.
- The sprint planning will be scheduled every 2 weeks to determine what work the developer team will pick up as a part of the sprint.



DEPLOYMENT

- After each sprint has been completed, the features which have been implemented will be **demonstrated** to the appropriate stakeholders in a **UAT (**User Acceptance Testing**) environment** (Heads of department, teachers, DAC etc.) for **feedback and comment**.
- Any adjustments required would be created as tickets, prioritised and added to the team's backlog.



Deployment

- Stories implemented are deployed to UAT environment
- End users and QAs would test features in UAT environment

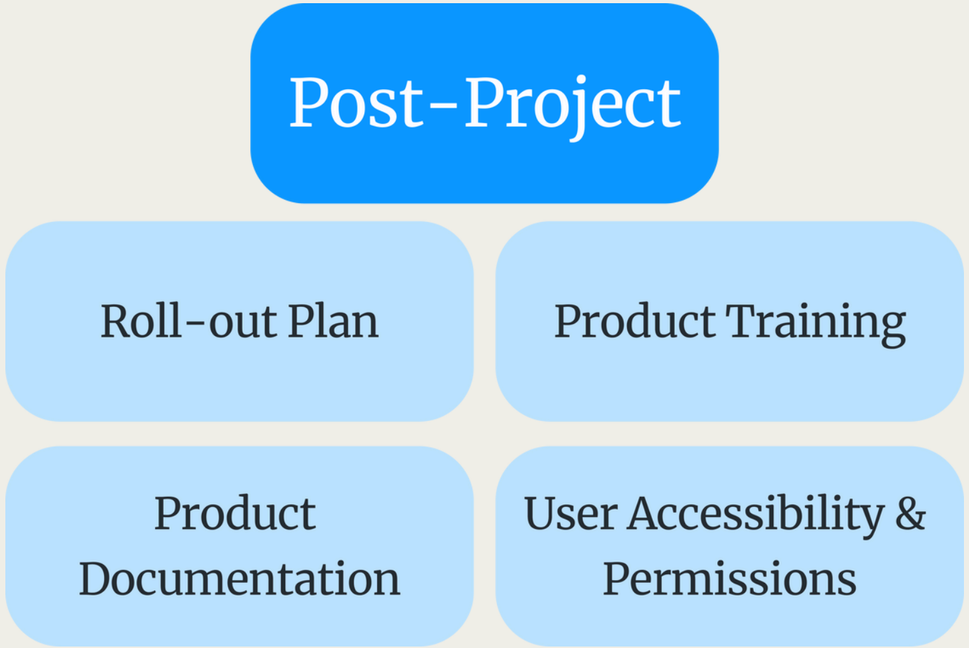
Release Demonstration

- Implemented features are demonstrated to stakeholders for review and feedback
- Any feedback/comments are placed in the backlog for prioritisation

POST-PROJECT

Once the requirements for the product have been completed, the following questions will need to be answered as a part of the roll-out plan:

- Who will access and use the sandbox product?
- Duration of sandbox testing commence until the product goes live?
- What training will be required for the product to go live?
- What documentation is required for the product?
- What is the worst case scenario and how do we mitigate against risks?



Thank you!