1. Orchard FSE: Project track- Feb 2018

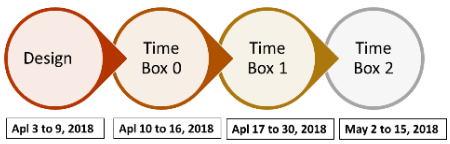
1.1 What is the need for a Project track?

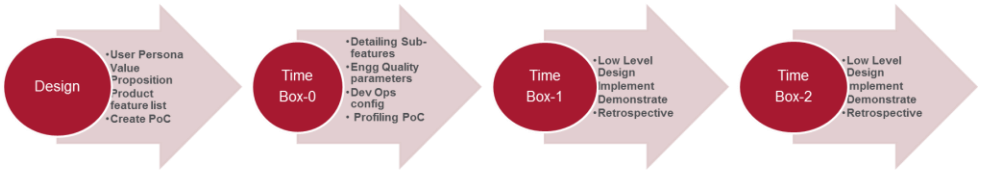
- Project v/s assignment
  - Mindset: Business Mindset, Social Mindset, Engineering Mindset
  - Near real time scenario
  - Exposure to entire SDLC
  - Increased complexity
  - Collaboration

1.2 Key elements of project track

- Mindset creation : Design thinking framework: business, customer, end user, PoC, wireframe
- Requirements to deployment: Dev Ops pipeline
- Understanding engineering quality , acceptance criteria
- Practices: collaboration, daily stand up, retrospective at end of timebox
- Continuous customer connect, potentially shippable product
- Fail fast and improve continuously

1.3 Timelines





1.4 Grouping

- Developers and SDETs (6 +4) OR (6 +3)
- Very similar to Scrum teams where we have cross functional teams

1.5 Leads

- Own projects end to end (quality, schedule, release, customer, blockers, scope)
- Mentoring on engineering capabilities/implementation
- Continuous observation
- Sub features to capabilities mapping

1.6 Engineering Reviews

- Engineering reviewer- Tech leads or modules leads will be assigned around 5 to 6 projects to do a thorough review of engineering aspects of coding and share feedback at regular intervals. Parameters for review:
    - Adherence to coding standards
    - Code coverage
        - SONAR CUBE
        - JASMINE, KARMA unit test cases
- Process auditor
    - Agile way of working : Orientation to leads
    - Continuous audit : Amar, Kavi, Bhima

1.7 Success criteria for project track

- Demonstrate capability in the context of project
- Deliver on commitment-Manage schedule
- Alignment to acceptance criteria
- Engineering metrics

1.8 Key changes from Nov 17 batch

- Dev Ops set up: lead's ownership
- Campus minds to configure Git Lab and Jenkins on local environment
- User story creation: 2 User stories per project team: meeting set standards to be created and sign off. We will share the rest of the stories
- Higher focus on coding aspects
- Role of an Engineering manager to be split into 2 roles:
    - **Engineering reviewer:** Tech leads or modules leads (Good learners from FSE 301 programs and past Java/Dotnet leads) will be assigned around 5 to 6 projects each to do a thorough review of engineering aspects of coding and share feedback at regular intervals.
    - **Process auditor:** Leads would be oriented on Agile practices that we want teams to focus on and we will do regular audits of their approach and practices to ensure alignment. Amar, Kavi, Srividya would play role of auditors

1.9 Agile way of working

Project Elements	Dev Track	Testing Track	Customer/Reviewer/Auditor
PoC	- Implement basic version of app	- Test the app end to end	- Reviewer/Auditor – Review the code w.r.t engineering metrics and set the expectations
Problem Statement	- Understand and define the scope	- Understand and finalize testing plan	
Feature implementation	- Write user stories - Finalize wireframes - Create project structure - Create UI layouts - Implement each features	- Define test cases - Define test data - Define automation framework - Implement automation framework	1. Customer: Review the scope, wireframes 2. Reviewer: Review project structure, UI Layouts, testing framework 3. Auditor - Audit Approach and practices to ensure alignment
Intermediate release	- Release app for testing	- Test and report to Dev team	1. Customer – Share pre-demo feedback
Final release	- Work on bug shared by testing team - Re-release app with updated version	- Test and report to Dev Team	2. Customer – share final demo feedback and ideas for next time-box 3. Reviewer - Audit approach and practices to ensure alignment

1.10 Release plan

Time-Box 1:

- Day 6
- Day 9

Time-Box 2:

- Day 5
- Day 7 (Optional, decide based on the progress)
- Day 9

Release time:

- 9 AM

1.11 Engineering Reviewer

Role:

In every FSE Orchard Program, the LEADs perform the role of coaching, guiding, nudging, inspiring and hand-holding. The LEAD is responsible for the Technical Learning of the participants.

The reviewer has a bigger role. The reviewer is responsible for elevating the Campus Mind and enable him to see the larger picture, appreciate the technology in a deep way and in terms of business problems being solved.

Responsibilities:

- Must review Campus Minds Learning and Deliverables.
- Investigate the Code a bit and perform the following.
    - Provide comments to the Learners on where they must improve
    - Provide comments to the LEAD on what aspects they need guidance and how the LEAD must perform the guidance specifically to those topics
    - Helping Campus Minds appreciate the alternatives
    - Helping Campus Minds appreciate the implications and consequences
    - Helping Campus Minds sequence various elements in the right manner
    - To provide the right comments for their continuous development

When to review?

Time Box 1	Day 5 and Day 8
Time Box 2	Day 4, 6 and 8

What deliverables need to be shared with reviewer?

- Project artifacts
- Code repository
- Deployed URL

1.12 Capability Evaluation guidelines

- The Leads are expected to evaluate both foundational and advanced capabilities in the context of project scenario and based on the deliverables shared by Campus Minds.
- If deliverables doesn't have scope to evaluate all observations then Leads are expected to tweak or change the given scenario and ask Campus Minds to implement the solution – based on their deliverables/answers Leads can assess other observations.