

# Weekly Planning of BSI Corporate Online Bootcamp

# Powered by Refactory

#### Week 1

- Software Development Life Cycle
- Project Management (Plan, Milestone, Resource & Cost management, Technology, Progress Report/Ticketing, dll)
- Algorithm & Basic Programming
- Framework & Tools for development
  - Version Control System (Git)
  - DotNet Core CLI

#### Week 2

- Introduction to C#
- Variables, Data Types, Nullables
- Control Flow (if, else, switch)
- Loop (for, while, do-while)
- Exceptions and error handling
- How to debug with Visual Studio / Visual Studio Core
- Testing Framework

#### Week 3

- Enums
- Struct
- Arrays
- Collections
- Generics
- File I/O



# Week 4

- Namespaces
- Object Oriented Programming
  - Classes and Objects
  - Encapsulation
  - o Inheritance and Polymorphism
  - Interfaces and abstract classes

# Week 5

- ASP.NET Core MVC
- Routing
- Middleware
- Razor
- Blazor
- Static files
- Deployment

#### Week 6

- Database
  - Data types
  - Schema Design
  - Relationship
  - SQL Query
  - o Prepared Statement
  - Transaction

#### Week 7

- LINQ
- Entity Framework



#### Week 8

- Async / Await
- JSON & XML
- Ajax
- Web APIs

# Week 9

- ASP.NET Core Identity framework
- Authentication
- Authorization
- User management

# Week 10 - 12

- End to End Project
  - Project Plan
  - o System Architecture,
  - o Design UI&UX,
  - o Front-end,
  - o Back-end
- Evaluation



# **Detail Example of Day 1 on Week 1**

| Start at | End at | Activities   | Goal   | Detail Materi   |
|----------|--------|--|--|---|
| 9:00     | 10:00  | Pengenalan platform, timeline, aktivitas<br>apa saja yang akan dilakukan selama<br>pelatihan, dan memastikan semua hal<br>yang dibutuhkan telah ter-install                                | Peserta<br>mengerti<br>cara<br>menggu<br>nakan<br>git dan<br>project<br>manage<br>ment     | Pengenalan platform Slack<br>sebagai sarana komunikasi<br>dalam tim. Pengenalan<br>GitLab dan GitHub.<br>Pengenalan platform Asana<br>sebagai project management.                             |
| 10:00    | 11:00  | Pengenalan version control system (git)  |  | Pengenalan terhadap fungsi<br>dari Git Clone, Git Push, Git<br>Commit, dan lain-lain serta<br>dikenalkan cara deploy ke<br>GitHub   |
| 11:00    | 12:00  | Pengenalan project management (kanban, milestone, issue, assignment, time tracking)  | Peserta<br>dapat<br>mengerti<br>dan<br>memaha<br>mi work<br>flow dari<br>setiap<br>project | Pengenalan detail Asana<br>sebagai project management,<br>dimulai dari cara membuat<br>project di Asana, membuat to<br>do list (tiket) beserta<br>deskripsinya, cara update<br>progress, dst. |
| 12:00    | 13:00  | Ishoma   | Istitahat + sholat + makan   |   |
| 13:00    | 15:00  | Latihan membuat halaman web tanpa<br>template dengan HTML dan CSS untuk<br>data CV pribadi. Menginisiasi git, membuat<br>git commit. Memasukkan ke GitHub, lalu<br>deploy ke GitHub Pages. | Peserta<br>dapat<br>mengeta<br>hui flow<br>step by   | Direct practical kemudian<br>mengimplementasikan materi<br>mengenai Git   |





|       |       |   | step<br>cara<br>commit,<br>push,<br>dan<br>deploy<br>ke Git              |  |
|-------|-------|---|--|--|
| 15:00 | 15:45 | Break   | Jeda ibadah  |  |
| 15:45 | 17:00 | Latihan membuat git branch dan merge request ke peserta lain. | Peserta dapat bekerja dalam tim menggu nakan git dan project manage ment | Melanjutkan membuat<br>halaman web yang sama<br>seperti sebelumnya namun<br>peserta berkontribusi<br>terhadap git peserta lain |