**Internship**

**Topic: Microservices with a Brief Introduction to Docker**

**Objectives:** To provide a real-world scenarios and best practices of Microservices. Training objectives may focus on assignments and collaborative exercises. The student will be able to conceptualise, understand and feasibly develop a Java application upon completion of the internship.

**Estimated duration:** 4-5 weeks

**ICPEP SINGAPORE INTERNSHIP PROGRAM**

**Duration:** TBA

**School:** Bulacan State University

**No. of OJT:**

|  |  |  |
| --- | --- | --- |
| **Week** | **Date** | **Activities** |
| Week 1 | TBA | **Discussions**  ***Overview***   * What are Microservices * Microservices Architecture * Introduction to SpringBoot * Rest API Design Guidelines and Conventions   ***New Activity***   * Setting up your computer   Requirements: Java 8 or latest, IDE (Eclipse or NetBeans), --Docker Desktop |
| Week 2 | TBA | **Discussions**   * Discuss challenges, confusion and possible solutions to the technical problem/s   ***Getting Started***   * Create Microservices in Java * Creating Rest API * Documenting APIs * Consuming a Microservices   ***New Activity***   * First assignment (Solo) |
| Week 3 | TBA | **Discussions**   * Checking of progress * Discuss challenges, confusion and possible solutions to the technical problem/s   ***Handling Data***   * Domain-Driven Design * Relational vs. NoSQL data * Java Persistence API * Polyglot Persistence   ***New Activity***   * Second assignment (Group) * Assistance on technical problems encountered * Assistance on project documentation |
| Week 4 | TBA | ***Discussions***   * Checking of progress * Discuss challenges, confusion and possible solutions to the technical problem/s |
| Week 5 | TBA | **Submission of the second assignment** |