503111

Java Technology

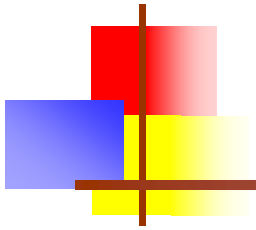
INTRODUCTION TO THE COURSE

General Information

- Course name: Java Technology
- Course code: 503111
- Number of credits: 3(2.1) – ECTS: 4.67
- Prerequisite: No
- Prior-Completion: Web Programming and Applications (503073)
- Name Of Lecturer(s): Nguyen Thanh Phuoc, Nguyen Ngoc Phien, Mai Van Manh
- Department: Software Engineering
- Faculty: Faculty of Information Technology

Course objectives

- Learners master the technology and techniques used in software development on the Java platform.
- Learners have the ability to build applications or dynamic websites using the MVC model, know how to use ORM Frameworks (Object Relational Mapping) in data management.
- Learners have the ability to apply the knowledge they have learned to build dynamic websites, and have the ability to learn new technologies related to other programming languages by themselves.
- Learners are trained thinking skills and programming skills to solve problems professionally.



Brief course content

- Basic and advanced Java programming language.
- Working with databases in Java: JDBC, Hibernate, Spring Data JPA.
- Technologies and techniques in software development on Java platform such as Servlet & JSP, Spring MVC, Spring Boot, Spring Security

Teaching materials

- [1]. Craig Walls, [2018], Spring in Action, 5th Edition, Manning Publications, New York.
- [2]. Maydene Fisher, Jon Ellis, Jonathan Bruce, [2003], JDBC API Tutorial and Reference, Third edition, Addison Wesley, Boston.
- [3]. Christian Bauer, Gavin King, Gary Gregory, [2015], Java Persistence with Hibernate, 2nd Edition, Manning Publications, New York.
- [4]. Joel Murach, Michael Urban, [2014], Murach's Java Servlets and JSP, 3rd edition, Mike Murach & Associates Inc, California.
- [5]. Laurentiu Spilca, [2020], Spring Security in Action, 1st Edition, Manning Publications, New York.
- [6]. Cay S. Horstmann, [2014], Java SE 8 for the Really Impatient, 1st Edition, Addison Wesley, Boston.
- [7]. Iuliana Cosmina, Rob Harrop, Chris Schaefer, Clarence Ho, [2017], Pro Spring 5: An In-Depth Guide to the Spring Framework and Its Tools, Apress, New York.

Description of Evaluation

Evaluation categories	Weight (%)	Types of questions	CLOs (Recorded as [1], [2], ...)
Process evaluation 1	10	Process Exercise	[1], [2], [3]
Process evaluation 2	20	Process Exercise	[1], [2], [3], [4]
Mid-term test	20	Essay	[1], [2], [3]
Final examination	50	Report	[1], [2], [3], [4], [5]