

Direct Entry Program 6

Starting Date: **2020-September-24**

End Date: **2020-December-24**

Module	Status
Programming Fundamentals and Designing	Done
Integrated Development Environment (IntelliJ IDEA)	Done
Object-Oriented Programming - 1	Done
Modern UI Designing (Java FX)	Done
Data Structures and Algorithms - 1	Done
Exception and Error Handling (in Java) -1	Done
Data Validation with Regular Expressions (RegEx)	Done
Database Management System (DBMS - MySQL, DBeaver, Intro. to Client-Server Architecture)	Done
SQL Programming	Done
Stored Procedures and Triggers	Done
Database Programming with Java JDBC (Singleton DP, Regular vs. Prepared Statements, SQL Injections)	Done
Database Transactions - I	Done
Reporting in Applications (Jasper Reports, Jasper Studio, Sub Reporting)	Done
File I/O, Serialization, and Resource Management	
In-memory POS Desktop Application	Done
JDBC POS Desktop Application	
JDBC Banking Application	

Model View Controller Architecture (MVC)	
Software Architecture	
Design Patterns	
Design Principles	
Logging	
Introduction to Cryptography	
JDBC + Layered Architecture Desktop Application	
In-Class Assignment: Layered Architecture	

Individual Project	
Source Code Management Tools (GIT, GitHub, BitBucket)	
Object Relational Mapping (ORM) with Hibernate and JPA (JPQL, HQL)	
Programming with Java Reflection API	
Revamped Hibernate Desktop Application	
Revamped JPA - Desktop Application	
Spring Framework (Core, SpEL)	
Development & Life Cycle Tools (Ant vs. Maven)	
Revamped Spring + Hibernate Desktop Application	
Revamped Spring + JPA Desktop Application	
Integrating Hibernate and JPA with Spring	
Revamped (Spring + Hibernate) Desktop Application	
Revamped (Spring + JPA) Desktop Application	
Integrating Spring Data JPA Project	
Revamped Spring + Spring Data JPA Desktop Application	