



# **Project Assessment (Handout for Learner)**

## **Module 6: Java Programming for Developers**

Approved Assessment Centre: BELLS Institute of Higher Learning Pte Ltd
Candidate Name:

## VERSION CONTROL RECORD

Version	Effective Date	Changes	Author
1.0	29th Aug 2023	First Edition	Program Creator: Chor Kun Xin Course Developer: Poh Soon Hock

Candidate's Name (as in NRIC):	
Candidate's NRIC (Please use last four figures of NRIC, e.g. "SXXXX123A"):	S/T XXXX _ _ _ / _
Assessor's Name:	
Assessor's NRIC: (Please use last four figures of NRIC, e.g. "SXXXX123A"):	S/T XXXX _ _ _ / _
Duration of Assessment:	
Allocated Duration:	15 minutes
Start Time	
End Time	

## Project Assignment

This **Project Assignment with Oral Clarification** is to gather evidence for the following learning Outcomes:

- LO2: Make use appropriate data types for variables
- LO3: Able to analyze and implement branching and loops
- LO4: Define and invoke methods with and without parameters
- LO5: Design simple classes and instantiate objects
- LO6: Implement single-level inheritance
- LO7: Implement method overriding
- LO8: Define and use abstract classes and interfaces

# Project Assignment - Portfolio

## *Java Programming for Developers*

### *Requirements*

In this portfolio project, you will create an interactive **Create, Read, Update** and **Delete** application using Java.

- The application must be developed with Java. No other frameworks are allowed.
- The user must be able to perform CRUD on at least **one type** of object, resource or document (a todo task, a customer record, an expenditure etc.)
- Your project should feature a usable **command line interface** which allows the user to select which of the CRUD operations to perform.

### *Marking Criteria*

#### **UI/UX**

- The application must have a **command line interface** which allows the user to select which operation to perform. Use Java's built-in methods (such as *System.Scanner*) to implement this interface.

#### **Java Proficiency**

- Your program must have at least one of the following:
  - At least one integer
  - At least one double
  - At least one String
  - At least one array or collection

- At least two **for** or **while** loops
- At least two **if/else** or **if/else if**
- Your program must call at least three methods
- Your program must have at least two methods that accept one or more parameters
- You must have at least **one** class that can be instantiated. The class must have at least **three methods** that are called, and **at least two methods that accept one or more parameters.**
- You must demonstrate **inheritance** at least once
- You must override at least one **method**
- You must have at least one **interface** or **abstract base class.**

### Submission

- The project must be hosted on a Github repository and the link must be submitted via the LMS.
- A zip file of all the source code and assets required to deploy the project must be submitted via the LMS.

### Oral Clarification for Project Work

- The duration of the Oral Clarification is 15 minutes
- The assessor will conduct an oral clarification to verify the evidence collected
- The assessor may ask additional questions if evidence presented is insufficient to ascertain competency of the candidate

### Individual

This project work is an individual assessment