# ABC’s Inventory Management System

## Technical Competency Demonstrator

ABC’s Inventory Management system does not require to handle large scale data as the company only has 2 stores and 1 warehouse. The company’s 5-year plan only indicates it opening 3 new stores. Taking this into consideration, the technologies required to build a small-scale application are Core Java, MySQL database management system and XML. The following are the technical competency of the team members:

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| Technology | Description | Competency | Projects |
| Core Java | Use of Java class, methods, loops, conditional statements, data structures, inheritance, polymorphism, types of classes, threads, database connection, JavaFX UI Controls and Multimedia, Collections framework and so on. | Experienced | * Done extensive projects using core Java in semesters 201730 and 201760. |
| MySQL | Schemas, Queries, Tables, Primary Key, Foreign Key | Experienced | * Done projects to build basic database application using java in semester 201760 * Course on introduction to Relational Databases and MySQL in semester 201660. |
| XML | Elements, Attributes, DOM, Tags | Beginner | * Introduction to XML course from Lynda.com |
| Software Testing | Unit Testing, Integration Testing, User Acceptance Testing, Mockito | Beginner | * Introduction to Java software testing using the Mockito framework |
| Version Control (Using Git based version control) | Feature Branch, Commits, Merging, Code review | Beginner | * Introduction to Version Control Practices in semester 201760 |
| Systems analysis and design | Requirements modelling, Domain Modelling, State Diagram, Sequence Diagram, Use Case Realization | Experienced | * Done extensive projects analyzing and designing systems. Drawing various diagrams to build systems based on business rules in semesters 201660 and 201760 |
| Project Management | Project Management Methodologies, PMBOK (Project Management Body of Knowledge), MOV and Business Case, Stakeholders and Communication, Scope Management, Work Breakdown Structure, Gantt Chart, Risk Management, Quality Management, Change Management | Beginner | * Done projects following the PMBOK guide in semester 201760 |