Amplify Mindware

Table of Contents - Hibernate 3.x	
Day 1	**1. Introduction to Hibernate** a) Hibernate Technology Benefits b) Hibernate Architecture Overview c) Persistence lifecycle d) Object identity **2. Getting started with Hibernate quickly** a) Mapping tables to beans b) Mapping properties to columns c) Using Jakarta commons lang to implement equals and hashCode d) Introduction to DBUnit for TDD with ORM e) Lab 1: Setting up the user Object **3. Relationships** a) Setting up all types of relationships b) Setting up a one to many relationship c) Understanding bidirectional relationships d) Lab 2: Setting up one to many relationship (Group to User) e) Creating a simple application user authentication f) Setting up a many to many relationship g) Understanding unidirectional relationships h) Lab 3: Setting up many to many relationship (User has roles) i) Setting up a one to one relationship j) Lab 4: Setting up one to one relationship (User has ContactInfo) k) Setting up an simple inheritance relationship l) Lab 5: Setting up an inheritance relationship (Employee is a user) **4. Basic queries** a) Working with queries b) Named queries c) Lab 5: Using queries and named queries
Day 2	**1. Using Hibernate Transaction support** a) Local transactions, global transaction b) Hibernate transaction API c) Isolation levels d) Lab 6: Using Hibernate Transaction API

	e) Optimistic and Pessimistic locking (versioning) f) Lab 7: Implementing optimistic locking with versioning **2. More mapping concepts** a) Hibernate type system b) Mapping collections of value types c) Three ways to map inheritance d) Lab 8: Reimplementing Roles as a typed collection (User has Roles) e) Lab 9: Reimplementing Employee as a separate table (Employee is a User) f) Working with compound keys g) Lab 9: Working with compound keys
Day 3	**1. Advanced Queries** a) Working with the Query API b) Working with Binding Parameters c) Grouping d) Subqueries e) Optimizing queries f) Native SQL query g) Lab 10: Using advanced query support h) Lab 11: Using native SQL query support **2. Using Hibernate and Spring** a) Spring Intro b) How Spring simplifies Hibernate development c) Using HibernateTemplate d) Using Spring DAO support e) Using Spring's transaction support (declarative transactions) f) Lab 12: Using Spring DAOs g) Lab 13: Using declarative transactions.
Day 4	**1. Hibernate Caching** a) Caching overview b) Hibernate Caching Architecture c) Hibernate API to control cache d) Working with EHCache

	e) Lab 14: Using EHCache to enhance performance f) Working with JBossCache g) Lab 15: Setting up a distributed cache cluster for enterprise applications