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#### **Document History** Date **Course Version** Software Version No. Developer / SME **Change Record Remarks** No. 13-Nov-2008 Oracle9i Rajita Dhumal **Content Creation.** 28-Nov-2008 CLS team Oracle9i Review. 14-Jan-2010 1.2 Oracle9i Anu Mitra, Review 14-Jan-2010 Oracle9i Rajita Dhumal, CLS Incorporating Review Comments 16-May-2011 Oracle 9i Anu Mitra Integration Refinements 17-May-2013 Oracle 9i Hareshkumar **Courseware Refinements** Chandiramani 7-July-2016 2.2 Oracle 9i Kavita Arora Integration Refinements Capgemini

#### Course Goals and Non Goals

- Course Goals
- To understand RDBMS Methodology.
- To code PL/SQL Blocks for Implementing business rules.
- To create Stored Subprograms using Procedures and Functions.
- To implement Business Rule using Constraints.
- Course Non Goals
  - Object Oriented programming concepts (ORDBMS) are not covered as a part of this course.

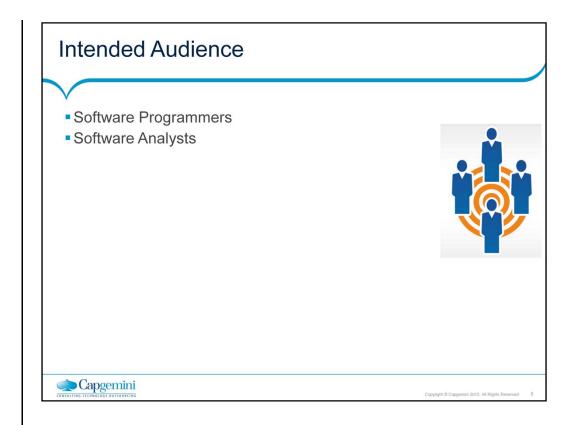




# Pre-requisites

- Require a fair proficiency level in Relational Database Concepts.
- Require good proficiency in DBMS SQL





# Day Wise Schedule Day 1 Lesson 1: PL/SQL Basics Lesson 2: Exception Handling Lesson 3: Procedures and Functions Lesson 4: Triggers

# **Table of Contents**

- Lesson 1: PL/SQL Basics
  - 1.1: Introduction to PL/SQL
  - 1.2: PL/SQL Block Structure
  - 1.3: Handling Variables in PL/SQL
  - 1.4: Scope and Visibility of Variables
  - 1.5: SQL in PL/SQL
  - 1.6: Programmatic Constructs



# **Table of Contents**

- Lesson 2 Exception Handling
  - 2.1: Error Handling (Exception Handling)
  - 2.2: Predefined Exception
  - 2.3: User Defined Exceptions
  - 2.4: OTHERS Exception Handler



# **Table of Contents**

- Lesson 3: Procedures, Functions, and Packages
  - 3.1: Subprograms in PL/SQL
  - 3.2: Anonymous Blocks versus Stored Subprograms
  - 3.3: Procedures
  - 3.4: Functions

#### ➤ Lesson 4: Database Triggers

- 4.1: Concept of Database Triggers
- 4.2: Types of Triggers
- 4.3: Disabling and Dropping Triggers
- 4.4: Restriction on Triggers
- 4.5: Order of Trigger firing
- 4.6: Using :Old and :New values,
- 4.7: WHEN clause,
- 4.8 Examples on Triggers



# References

- Oracle PL/SQL Programming, Third Edition; by Steven Feuerstein
- Oracle 9i PL/SQL: A Developer's Guide
- Oracle9i PL/SQL Programming; by Scott Urman





# Next Step Courses (if applicable)

- Data Warehousing Concepts
- Reporting / ETL tools
- Database Administration / Database Performance Tuning





