# Department of Computing

**CS 213: Advanced Programming**

**Class: BSCS 5 AB**

# Lab 10: Spring + Aspects

**Date: November 30th, 2017**

**Time: Thursday (10:00-12:50 & 14:00 – 16:50)**

# Instructor: Fahad Ahmed Satti

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# Lab 10: Spring + Aspects

## Introduction

Fix and extend the sample code “SpringLogAspects”, shared on LMS to map your current courses and students as given in the description section.

## Objectives

After performing this lab students will be able to understand:

* Spring
* Aspect Oriented Programming

## Tools/Software Requirement

* You can take help from internet but remember **no plagiarism.**

**Description**

For all your current courses create appropriate beans and persistence classes and map them with atleast 5 current students for each course.

Create unit tests for CourseBoImpl and StudentBoImpl.

Using Aspect Oriented Programming log all course events in the database.

Each student must, individually build the complete application on their own. Students must upload their solutions on LMS to qualify for evaluation.

**Lab Task**

* Extend the given example SpringLogAspects to map your current courses, as stated above.
* Implement Unit tests.
* Persistently, log the events using Aspect Oriented Programming.

## Deliverables

* Each submission is individual with the following composition:
  + Updated Source Code
  + DB dump files
  + Documentation(Introduction and Analysis)
* Convert your submission files into a zip folder and name it as given below, finally upload the zip folder to LMS.
  + Name – Registration No. – Section

## Grade Criteria

The lab will be graded between 1 and 10 based upon your understanding of Hibernate and Hibernate Association Mapping. To qualify for a viva, you must complete all tasks, individually.