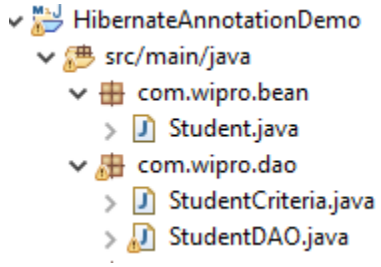
Sample Appliction for Hibernate Criteria Query

Let us learn to create some Queries to retrive data from the database.

1. Let us take the Annotation demo project
2. For querying data let us create a separate dao class under a new package called com.wipro.dao
   a. Create a package called com.wipro.dao
   b. Under the package create class called StudentCriteria

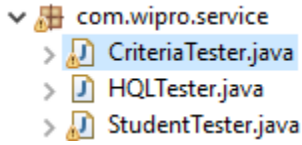


   c. Edit the class to add the following script

```
package com.wipro.dao;

import java.util.List;

import javax.persistence.criteria.CriteriaBuilder;
import javax.persistence.criteria.CriteriaQuery;
import javax.persistence.criteria.Predicate;
import javax.persistence.criteria.Root;

import org.hibernate.Session;
import org.hibernate.SessionFactory;
import org.hibernate.cfg.Configuration;
import org.hibernate.query.Query;

import com.wipro.bean.Student;

public class StudentCriteria {
	SessionFactory factory;
	/**
	 * Default Constructor
	 * It initializes the SessionFactory based on configuration details
	 * provided from the myconfig.cfg.xml file
	 */
	public StudentCriteria() {
		Configuration cfg = new
Configuration().configure("myconfig.cfg.xml");
		factory = cfg.buildSessionFactory();
	}

	public List<Student> getAllStudents(){
		Session session = factory.openSession();
		CriteriaBuilder cb = session.getCriteriaBuilder();
		CriteriaQuery<Student> cr = cb.createQuery(Student.class);
		Root<Student> root = cr.from(Student.class);
		cr.select(root);
```

```
		Query<Student> query = session.createQuery(cr);
		return query.list();
	}


	public List<Student> getStudentsByCourse(String course){
		Session session = factory.openSession();
		CriteriaBuilder cb = session.getCriteriaBuilder();
		CriteriaQuery<Student> cr = cb.createQuery(Student.class);
		Root<Student> root = cr.from(Student.class);
		cr.select(root);
		Predicate predicate = cb.equal(root.get("course"), course);
		cr.where(predicate);
		Query<Student> query = session.createQuery(cr);
		return query.list();
	}

}
```

d. Create the Tester class called CriteriaTester under service package



e. Edit the code with following script

```
package com.wipro.service;

import java.util.List;

import com.wipro.bean.Student;
import com.wipro.dao.StudentCriteria;
import com.wipro.dao.StudentDAO;

public class CriteriaTester {

	public static void main(String[] args) {
		StudentCriteria dao = new StudentCriteria();

		/**
		 * Display all the records
		 */
		List<Student> result = dao.getAllStudents();
		System.out.println("Student Records");
		for(Student ob : result)
			System.out.println(ob);

	System.out.println("**************************************************
**");

		/**
		 * Display Only Oracle the records
```

```
		 */
		List<Student> result1 = dao.getStudentsByCourse("Oracle");
		System.out.println("Student Records");
		for(Student ob : result1)
			System.out.println(ob);

	System.out.println("**************************************************
**");

	}
}
```

f. Run and verify the output