

Indian Institute of Technology, Kharagpur

Department of Computer Science and Engineering

Assignment 2 - Java Programming, Spring 2013-14

Software Engineering (CS 29006)

Assignment Date: 09-Jan-2014
Submission Deadline: 23:55 hrs, 28-Jan-2014

Grading guidelines:

1. Zero marks for a submission if it does not pass the plagiarism test.
2. *Break-up of Credits will be as follows:*
 - (a) Percentage of features implemented: 70%
 - (b) Aesthetics: 10%
 - (c) Whether reasonably able to answer questions: 20%.

1. Automatic Multiple Choice Test Evaluator (MCTE):

The teacher should first set up the test by inputting a text file containing the questions, the corresponding options and the answers for the same. After the questions have been entered, the students can take tests on the computer (Please try for allowing students to take tests concurrently using browsers on different computers if you know Java Servlet programming, but no penalty if you do not do this). For taking the test, the MCTE should first ask the student to enter his name and roll number. MCTE should display one question and four alternative options as possible answer to the question. A student can mark only one option for any question. A submit button at the end of the displayed question would allow the student to submit his answer. After the student has answered all the questions, the marks scored by the student should be displayed. Later, the teacher should be able to view the statistics of the students' performance and the performance of any particular student. [20 Marks]

2. Video Store:

The following software is required to be developed for a video rental store.

- The store has a large collection of video CDs and DVDs in VHS and MP4 format as well as music CDs.
- A person can become member by depositing Rs. 1000 and filling up name, address, and telephone number. A member can cancel his membership and take back his deposit, if he has no dues outstanding against him.
- Whenever the store purchases a new item, the details such as date of procurement and price are entered. The daily rental charge is also entered by the manager. After passage of a year, the daily rental charge is automatically halved.
- A member can take on loan at most one video CD and one music CD each time. The details are entered by a store clerk and a receipt indicating the daily rental charge is printed.
- A member can take on loan at most one video CD and one music CD each time. The details are entered by a store clerk and a receipt indicating the daily rental charge is printed.
- Whenever a member returns his loaned item, the amount to be paid is displayed. After the amount is paid, the items are marked returned. [20 Marks]