



Uva Wellassa University of Sri Lanka
Faculty of Science and Technology
Computer Science and Technology Degree Program
3rd Year 2nd Semester Examination – August/September 2014
CST 323-3 Web Development Technology



Time Allowed: **Three (03) hours**
Mark allocation: **100 mark**
All files must be saved in your **Z drive (Z:)**

You have been given a Requirement Specification (RS) for a Library Information Management System (LIMS) and you are required to develop a web application for a LIMS according to the RS given below.

Functional requirements

Librarian/ Administrator	Student
Login to Library Management System	Login to Library management system
Search for book	Search for book
Search of the user	Request for a book
Add new books to the database	Logout from the system
Add new student to the database	
Updating information about book	
Remove a book from database	
Assign (lending) a book for student	
Returning a book (by student)	
Logout from the system	

Non-functional requirements

- Security (user level authentication)
- Reusability (reusing code snippets and files)
- Usability and accessibility
- User-friendly exceptional handling (both web and database errors)

Develop a web application which fulfills all the requirements specified in RS document. You are responsible for designing the required database with appropriate tables. All the exceptions generated by the web and database server should be properly handled. Styling and additional formatting are not required. However, the clarity and the simplicity of the interfaces are highly concerned. You are free to define any fare policy or reasonable logic where applicable.

Your database should consists of the following tables (creation of additional tables is allowed.)

- Librarian
id, email, fName, lName, password
- Administrator
id, email, fName, lName, password
- Student
student id, Email, fName, lName, Password, ContactNo, RegistrationDate, Faculty, Department, DegreeProgram, Address, Remarks
- Book
book ref, isbn, Title, Author, Publisher, Year, Price, Section, NoCopies, Availability
- Lending (or Borrowing)
student id, book ref, lendStatus, lendDate, Duration, Extended, Comments
- Returning
student id, book ref, returnDate
- Fine
student id, book ref, lateDays, fineAmount, FineDueDate
- Login
sessionid, user id, dateOfLogin, timeOfLogon, timeOfLogoff

Note:

- Appropriate tables should be created by yourself and populate the tables with test data.
- URL to run the PHP files: **http://web/EX110###/filename.php**
- URL to access the GUI of the mysql server: **http://web/sqlbuddy/**
- sqlbuddy credentials:
Username: **EX110###**
Password: **EX110###**
where ### is your examination index.