

EE4717

**NANYANG TECHNOLOGICAL UNIVERSITY**

**SEMESTER 1 EXAMINATION 2011-2012**

**EE4717 – WEB APPLICATION DESIGN**

November / December 2011

Time Allowed: 2 hours

**INSTRUCTIONS**

1. This paper contains 1 question and comprises 3 pages.
  2. Answer 1 question.
  3. This is an open-book examination.
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1. A university would like to develop a website for an academic workshop. The workshop is to be organized for a small group of researchers to meet and discuss the latest research development in multimedia. A screenshot of the Home page for a similar event is shown in Figure 1 on page 3. The key features observed from the screenshot are as follows:
  - A banner of the event at the top of the page.
  - A column on the left with navigation links to various pages, e.g. Organizing Committee, Call for Papers, Author's Guidelines, Paper Submission, etc.
  - The content area.

You are asked to design a more appealing website. When the user visits one of the pages by clicking on a link in the left column, he/she would see a similar visual layout to that of the Home page. The page content can be considered generally static.

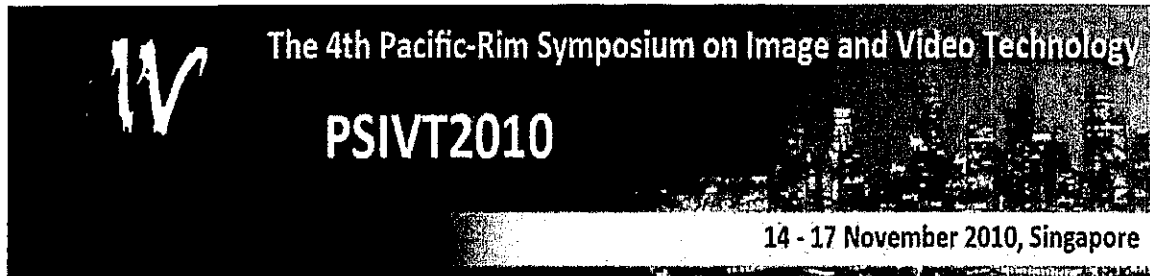
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In the Paper Submission page, the user would see the Author Registration form for a prospective author to submit an abstract of the paper. The author is required to enter his/her personal data and submit the paper abstract. The data, such as author's name, email address, title and abstract of the paper, should be stored in a database table named Author\_INFO on the web server. Upon submitting the registration data to the web server, the submission system should display a message "registration successful" if he/she is a new author. If the author has already registered, the submission system should display a message "author already registered". The web server should also check whether the data have been entered correctly by the user. The name should contain alphabetic characters only, and the email address should be consistent with the typical email address format.

Your design of the website should be similar to the one shown in Figure 1 so that the prospective authors would find it easy to navigate.

- (i) Based on the above scenario, sketch the site map and storyboards to illustrate the structure of your website.  
(10 Marks)
- (ii) Design the page layouts for the Home page and the Paper Submission page. Provide sketches of your designs with the necessary annotations.  
(15 Marks)
- (iii) Design the database table named Author\_INFO, and choose appropriate field names and data types. Underline the primary key in the table.  
(10 Marks)
- (iv) Implement the Home page and the Paper Submission page using Hypertext Markup Language (HTML) with the necessary Cascaded Style Sheets (CSS). You should use HTML Forms for handling author registration. The form is to be submitted to a Java servlet named "RegistrationServlet". Your implementation codes do not need to be complete but they should include the codes that control the page layout and visual styles.  
(25 Marks)
- (v) Write the Java servlet codes to implement author registration. Draw the hierarchy of all classes used in your Java servlet implementation. List the names of the classes together with their methods used in the servlet.  
(40 Marks)

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Organization  
Home  
Organizing Committee  
Steering Committee  
Program Committee

Papers  
Call for papers  
Important Dates  
Author Guidelines  
Paper Submission  
Paper Review

Program  
Conference Program  
Invited Speakers  
Tutorial  
Accepted Papers

Registration  
Registration  
Copyright Form  
Camera Ready Upload  
Presentation Guide

Information  
Venue  
Accommodation  
Local Information  
Contact Us

Related Links  
PSIVT 2011  
FG 2011  
ACCV 2010  
PSIVT 2009  
PSIVT 2007  
PSIVT 2006

#### News Update:

**The 5th Pacific-Rim Symposium on Image and Video Technology (PSIVT 2011) will be held in Gwangju Institute of Science and Technology, South Korea, November 2011.**

Thanks to all the participants of PSIVT2010. All the scheduled papers were presented.

The photo and video recordings of all paper presentations and keynotes are now uploaded to <http://ckicjl.phanfare.com/PSIVT2010/>, accessible by psivt2010 participants only.

The Fourth Pacific-Rim Symposium on Image and Video Technology (PSIVT2010) will be held in Nanyang Executive Centre, Nanyang Technological University (NTU), Singapore on 14th-17th, November 2010.

**All accepted and presented papers will be published by Conference Publishing Service in a CDRom proceedings, and included in IEEE Xplore and CSDL (IEEE and the IEEE Computer Society are not sponsors of PSIVT'10).**

PSIVT 2010 is the continuation of a series of successful events in Hsinchu, Taiwan in 2006, Santiago, Chile in 2007 and Tokyo, Japan in 2009. The symposium provides a forum for presenting and exploring the newest research and development in image and video technology by discussing the possibilities and directions in this field, and a place where both academic research and industrial activities are presented and meet for mutual benefit. It invites researchers, artists, developers, educators, performers, and practitioners of image and video technology from the Pacific Rim and around the world.

High-quality contributions from prospective authors are solicited in all aspects of image and video technology including, but not limited to:

- Image/Video Coding and Transmission
- Image/Video Processing and Analysis
- Image/Video Storage, Retrieval, and Authentication
- Image/Video Formation, Display, and Hardware
- Graphics, Visualization, and Pervasive Computing
- Scene Recognition and Understanding
- Multiview Image/Video Coding and Processing
- Computer Vision Applications

All papers will be subject to a double-blind review process which will be carried out by at least two experienced researchers in the field. Details on paper submission will be available soon.

**Figure 1**

END OF PAPER