**Poster Management System**

# Introduction

Oklahoma research day is a premier annual event celebrating student and faculty research, creative, and scholarly activities (<http://www.oklahomaresearchday.com/>). Students and faculty prepare posters demonstrating their research works. Our college, Math and Science, contributes the largest number of posters in UCO every year. Usually, people directly email their posters to the IT department of our college. After IT prints the posters, they will notify the authors to pick up their posters via emails. This approach, however, is not very effective as emails are constantly buried in the inbox or even forgotten. Motivated by this need, we will develop a poster management system to ensure that the posters can be tracked in the sequence of “submitted”, “printed”, and “notified”.

# Project Requirements

1. People who want to use this system should register first. They should provide their email addresses and determine their user names and password. Then, a confirmation email will be sent to confirm the registration.
2. After the registration, users can submit their posters in \*.ppt, .pptx, or .pdf format through the system.
3. Once a submission is issued, the concerned people in the IT department should be notified.
4. After the poster is printed, the IT person will update the poster’s status to be “printed” and a notification email is sent to the authors automatically.
5. The users (including the IT personnel) can check their posters status online by providing their user name and password. The status of the posters includes “submitted”, “processing”, “printed”, “finished”, “wrong format/size”, and “other errors”.
6. The IT personnel should be able to manage all the accounts, e.g., add, edit, and delete accounts.
7. People should be able to use the system through the Internet or with their smart phones.
8. You should develop a smart phone app instead of asking users to launch the browsers on their phones.
9. You can choose one of the following platforms to implement the mobile part:
   1. Google’s solution – Android
   2. Sun’s solution – J2ME
   3. Microsoft’s solution – Windows
   4. Apple’s solution – iOS

If you prefer to use other solutions rather than any of the above, please come discuss with me first.

You are particularly encouraged to develop your app on iPhone/iPad since people still love apple’s products.

1. You are encouraged to use cloud computing to implement the Web part. Possible cloud computing platforms are as follows:
   1. Microsoft Windows Azure
   2. Google App Engine
   3. Amazon EC2

You can choose other cloud computing platforms. Please discuss with me first.

1. You will be given at least half of the semester to design and implement your system. During the course of development, you should make a weekly presentation regarding the progress on your project. At the end of the semester, you will make another presentation to demonstrate the entire system and summarize what software engineering principles have been practiced during the development.
2. ABET outcome evaluation forms for system proposal, design, and testing will be provided. You need to read these documents and prepare your proposal, design, and testing documents accordingly.

# Tools to Use for Design and Development

1. You must use some UML CASE tools to make your analysis and design, such as IBM Software Architect, Rational Rose, or Microsoft Visio.
2. You must use Microsoft Project to work out your workplan and use MS Project to keep track of the progress of your project.
3. You may use Microsoft Visio to draw Entity-Relation diagrams (ERDs), and data flow diagrams (DFDs).
4. You must use some Unit Test tools (e.g., JUnit, CppUnit, etc.) to perform formal testing.
5. You must use some version control system to keep the consistency of your code. Possible choices include CVS, subversion, Microsoft visual source safe, etc.