Instructor: Dr. Bo Han
Email Address: bo.han@tamuc.edu
To protect your academic privacy, please always send me emails from your tamuc.edu email. Please use emails to ask me questions. This is the fastest way to reach me.

Skype: If you think an online tutoring is helpful, we can use Skype. Please send me an email to make appointment in advance, so that we will be both on Skype at the same time.

COURSE INFORMATION

Materials – Textbooks, Readings, Supplementary Readings

Textbook(s)
No required textbooks. I will provide you with the class lecture videos, PowerPoint slides, and developer guides on eCollege.

Course Description
This class will introduce the emerging and exciting mobile app development skills to you. We will focus on two subjects in this class:

- Android App Development. Using multiple examples, you will learn the underlying programming language (Java), and then use this programming language to build Android apps in the integrated development environment (IDE) Eclipse and Android Software Development Kit (SDK).
- Mobile Development for SAP. Mobile technology has become a critical component in enterprise information systems. We will learn how to use SAP SDK to develop apps that can work with cloud based central databases, and present data to users on the mobile devices.

Student Learning Outcomes
1. Students should understand basic object oriented programming (OOP) philosophy and develop working Android applications by using Java programming language.
2. Students should be able to develop a mobile application that communicates with enterprise business intelligence databases (i.e., SAP database).
3. Students should be able to use IDE software (i.e., SAP SDK, Android SDK, and Eclipse) for mobile application design.
4. Students should be able to develop a complete marketing plan for a mobile app project.

GRADING

Your assignments or class activities will be graded as below:

Exam (A Maximum of 40 Points)
The exam questions cover topics of OOP, Java language, XML, and Android programming.
The exam dates are:
**10 AM on March 23 to 6PM on April 4, 2015.**
I will send the review and exam reminders to your myLeo email again one week before the exam. Make sure to review for the exam according to my instructions.
The exam questions are already listed in Week 10 link on eCollege. You can start working on the exam earlier than the schedule listed above; however, you must turn it in before 6PM on April 4, 2015.

Homework (A Maximum of 50 Points)
There are 5 homework assignments in this class. The requirements and submission deadlines are listed in the weekly Assignment links on eCollege.
**Note:** You can complete several publishing-ready mobile apps after successfully completing these assignments. Publishing these apps is not required, but I highly recommend you to do so, and add the Google Play links of the published apps into your resume. According to my previous students who accepted job offers in companies such as L-3 Communications and Rackspace Hosting, showing working apps to future employers helped them a lot in the job seeking process.

Strategic Plan for a Mobile App Project (A Maximum of 10 Points)
The plan should cover the analyses of critical factors that can influence an app project's success (e.g., the functionality and novelty of the app, development process management, marketing strategies, and revenue models). The app you choose could be the one you developed during this semester, or the one you plan to develop in the future.
This plan should answer the following questions:
(1) What functions can your app offer to users?
(2) Why do you think your mobile app has a potential of being successful in the market?
(3) How can you reach the targeted customers? What are your strategies to increase the number of downloads?
(4) What is the revenue model of your app (e.g., pay-per-download, in-app ad, or in-app sales, crowdfunding, etc.)?
Excluding figures, data tables, and references, a minimum of 4 page analyses are required. You should use double-space, size 12 Times New Roman fonts in this report. You can cite the industrial and app market analysis report to support your arguments.

**Final Grades**
At the end of this semester, if your total point is between 90 and 100, you will get an A; if it’s between 80 and 89, you will get a B, and so on. Please note that the real point will be used to calculate your final grade. **No percentage or curving will be used for your final grade.**

<table>
<thead>
<tr>
<th>Total Points</th>
<th>Grade</th>
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<tbody>
<tr>
<td>90-100</td>
<td>A</td>
</tr>
<tr>
<td>80-89</td>
<td>B</td>
</tr>
<tr>
<td>70-79</td>
<td>C</td>
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<tr>
<td>60-69</td>
<td>D</td>
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<tr>
<td>below 60</td>
<td>F</td>
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**Bonus points**
You can participate in the instructor assigned activities to get a maximum of 3 points for bonus.

**LECTURE VIDEOS**
The lecture videos are very important to support your learning and academic success in this class. Be sure to watch the lecture videos in each weekly link. All lecture videos are located in the weekly links (Week 1, Week 2, ..., Week 14, Week 15) on eCollege, as shown in the example below:

**COMMUNICATION AND SUPPORT**
If you ask me questions by emails, I will reply you in 48 hours. However, I usually answer them much faster than this. **If you have questions in software operations, please be sure to include the screenshots of the issues in the emails.**
All assignment due dates, project deadlines, and exam time are central time in the United States.
TECHNOLOGY REQUIREMENTS

All operating systems (Microsoft PCs and Apple Macs) can run Eclipse IDE. Therefore, you can use any systems to develop Android apps.

The SAP SDK can only run on the following systems. Therefore, you must make sure that you can access to a computer that runs one of any Windows systems listed below:

- Microsoft Windows 7: Professional, Enterprise, or Ultimate: SP1 32- and 64-bit
- Microsoft Window 8 or 8.1: 32- and 64-bit

All PCs in the computer lab (BA 345) on Commerce campus are installed with SAP SDK.

COURSE REQUIREMENTS

Instructional / Methods / Activities Assessments

This course consists of a series of activities or assignments to help you to reach the learning objectives. Please refer to the following assessment tables to measure your performance.

<table>
<thead>
<tr>
<th>Assessment Items</th>
<th>Good</th>
<th>Acceptable</th>
<th>Poor</th>
</tr>
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<tbody>
<tr>
<td>Development Theory (Exam)</td>
<td>Understand the development theories such as the objective oriented programming (OOP) philosophy, system development life cycles, and be able to apply these theories for mobile app development.</td>
<td>Know the development theories such as the objective oriented programming philosophy, system development life cycles, but need more practices to be able to apply these theories in projects.</td>
<td>Don’t know the development theories such as the objective oriented programming philosophy, system development life cycles, and need extra tutoring after the lecture.</td>
</tr>
<tr>
<td>Development Process (Homework)</td>
<td>Be proficient in using the IDE software to implement the app design prototype. The prototype can run in IDE without issues. The codes of the projects are designed in an efficient way.</td>
<td>Be able to use IDE software to implement the app design prototype. The prototype can run in IDE with minor modifications.</td>
<td>Unable to use IDE software to implement the app design prototype.</td>
</tr>
<tr>
<td>Development Results (Final App)</td>
<td>The final software products (i.e., the apps) can run on mobile devices without issues.</td>
<td>The final software products (i.e., the apps) can run on mobile devices with minor modifications.</td>
<td>The final software products (i.e., the apps) can not run on mobile devices.</td>
</tr>
</tbody>
</table>
University Specific Procedures

ADA Statement

Students with Disabilities
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services
Texas A&M University-Commerce
Gee Library- Room 132
Phone (903) 886-5150 or (903) 886-5835
Fax (903) 468-8148
StudentDisabilityServices@tamuc.edu

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. (See Code of Student Conduct from Student Guide Handbook).

COURSE OUTLINE / CALENDAR
See “Tentative Class Schedule” on eCollege