BIS 394 Mobility Development

CLASS: BIS 394 Fall 2013 INSTRUCTOR: Anthony Kelly
OFFICE: GH 467
OFFICE PHONE: (859) 466-6207
LOCATION: GH 150
DEPT. PHONE: (859) 572-6366 OFFICE
HOURS: M 5-6:15 PM and by appointment
E-MAIL: kellya11@nku.edu

OUR VISION
The College of Informatics seeks to enrich the lives of its students by providing students an education from which they can positively change their lives.

OUR MISSION
Our primary mission is to educate undergraduate students from the Northern Kentucky/Greater Cincinnati metropolitan region to perform effectively and ethically in a global environment as professionals in business, public, and social enterprises. We encourage the partnerships between students, faculty and the community to continuously improve the educational experience of our students and to enhance the integration of scholarship and service to classroom learning.

Course Description
It's been years since Apple came up with the trademark phrase "There's an app for that!" and demand for software engineers with mobile app development skills has soared. In particular, there is a demand for engineers who understand the design and engineering challenges associated with mobile app development in enterprise contexts. This course, sponsored and taught by SAP, the leader in enterprise applications, will cover the techniques critical for creating enterprise mobile apps while having students develop applications for real customers. Aspects of iOS and Android programming will be covered and students will also learn about SAP's Unwired Platform, which adds the tools and techniques needed for enterprise mobile app development.

Course Objective
This course is designed to give students hands-on experience with a leading platform for mobile application development, and obtain real-work experience with customers who are implementing mobile strategies. When students complete this class, they will understand the difference between Hybrid web container applications, and Native applications. Students will have the hands on skills necessary for building out these applications, and will have a portfolio of applications under their belts.

COMMUNICATION
Please make sure you follow the following rules to communicate:
• Post your questions related to class materials and assignments in the “Questions” forums, not via e-mail. If your question is not posted there by another student in class, you should post yours. Try to be very clear on what your question is. Post your question in the forum that best fits your question. Look for my response within 48 hours and note any responses that other students may have provided. The Questions forums will help the class to efficiently use our time and clarify issues for all students enrolled in the class.

• Keep track of the tentative class schedule. Ask relevant questions to the topics assigned for that week. Questions concerning the past or forthcoming weeks will receive lower priority.

• It is your responsibility to check your NKU student e-mail account daily. I will respond to question forum postings and your e-mails within 48 hours during the business days, Monday – Thursday. If you send an e-mail on Friday, you will get a response sometime early in the next week.

• If you have a personal problem, write to my e-mail account: kellya11@nku.edu or call me at (859) 466-6207. If you must e-mail me, be sure to put the course identification “BIS - 394” in the subject line so that I can locate it quickly. Be clear in stating what your problem is and what help you want from me.

• You can submit the homework assignments earlier than the due date by using the assignment submission links in Blackboard. I will grade the assignments within 7 days from the due date.

INSTRUCTOR-STUDENT CONSULTATIONS:

• Office hours are posted in Blackboard and on my office door. These are times I’m guaranteed to be there. Outside of those times, if I happen to be in my office, I’ll be glad to help you. Additional consultation times between the student and the instructor may be scheduled, if needed.

ATTENDANCE:

• Students are expected to come to class on time and actively participate in class discussions and activities. Attendance will be monitored by the instructor.

Grading

This course will be graded in the following manner:

10% Class Participation and Attendance
40% Weekly Assignments
15% Midterm Presentation
25% Final Group Project
10% MIC

24 - MIC: Students will work in teams (recommended 3-5 person teams) to produce their final product. At a minimum, each team member should have the following technology skills: Excel, Word, PowerPoint; Internet and experience using Mobile Devices. Each team should have at least one team member with a basic understanding of project management, database, and data communication; and, at least one team member with the following conceptual skills: entrepreneurship, accounting, forecasting, SAP, HR, and public speaking.
**Requirements**
Students should be comfortable with basic programming skills and must have their own laptop with a Windows image installed. Mac Virtual Image is fine, however this will be a hands on class and we will be building applications using the Sybase Unwired SDK.

**Assignments**
There is usually one or two in class assignments per week for the first 5 weeks, and assignments generally build on previous assignments in that they become more complex and assume previous knowledge.

Assignments will be submitted via deploying to the instructors device. Assignments are due at 11:59pm on the due date. The grace period for all assignments is until 08:00 am the next day. Late assignments will not be accepted unless previously arranged.

**Mid-Term**
Layout a product idea

- Is the app a B To B, B to C
- How product will be used
- How will it be marketed
- General layout od screens
- Where will data be pulled for the product

We will provide an example of what the paper should look like.

**Final**
Develop product as best you can. There should be

- very specific utilization of the App.
- Marketing Plan for the Product
- Screen shots (or Developed)
- Data requirements
- Coding if possible ( not Required)
- Competition of App
- Who would purchase your app.

Students may offer their app idea to the team at the 24 Hrs of innovation and have the team help build the product and plan.

**Course Project**
The course project will be a real-world project. We will break into groups and each group will receive a different mobile app project to work on and build out for the customer. At the end of the course, the students will have a real application that they can put into their portfolio of work. Students are encouraged to think creatively and develop an application that comes close to the needs of the customer, but also shows creativity in their thinking. Students will be given a wide range of latitude in how to build and design the application.

Students are required to do an oral presentation of their project during class near the end of the semester.

**Teamwork**
Students are encouraged to work together in teams as we’ll be building a project together. I will allow
students to self-select their teams that they will be working with. As for the individual assignments, I
expect students to complete their own work using their own ID’s however; assistance from other students
is encouraged as it would be in the real world.

**GRADING SCALE:**

A represents *exceptionally high achievement* as a result of aptitude, effort, and intellectual initiative

B represents *high achievement* as a result of ability and effort

C represents *average achievement*, the minimum expected of a college student

D represents *minimum passing grade* except for courses taken on a pass/fail basis

F indicates *failure* in a course. Credit can be obtained only by repeating the course successfully.

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<thead>
<tr>
<th>Letter Grade</th>
<th>Equal to or Greater than</th>
<th>Grade Point</th>
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</thead>
<tbody>
<tr>
<td>A</td>
<td>930</td>
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<tr>
<td>A-</td>
<td>900</td>
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<tr>
<td>B+</td>
<td>870</td>
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<td>B</td>
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<td>C+</td>
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**STUDENT RIGHTS AND RESPONSIBILITIES:**

The maintenance of academic standards and integrity includes the obligation not to cheat or
plagiarize. A student who uses a dishonest or deceitful means to obtain a grade is guilty of
cheating; a student who submits another’s work as one’s own without adequate attribution is guilty of plagiarism. **Identical work will earn a grade of zero.**

Students are fully responsible for learning the course content and material disseminated in the class. Absences do not release you from this responsibility.

Please see the NKU Code of Student Rights and Responsibilities at http://www.nku.edu/currentstudents/policies/codeconduct.php

The College of Business has in addition its own Code of Student Conduct, created by student organizations. Please visit the College website at http://cob.nku.edu/docs/Etiquette_final.pdf

**CLASSROOM ETIQUETTE:**

- Show up on time. If you arrive late, please sit in the rear of the room and minimize the noise as you enter.
- All personal electronic communication devices are to remain off during class. If you must receive an important call, inform the instructor before class, sit near the door, and leave the room to answer the call. The instructor may regulate the use of laptop computers and other electronic devices in the classroom and during examinations.
- Please feel free to ask questions in the class. However, side discussions with other students, even when they are about the class, are disruptive to other students and to the instructor.
- In order to maintain an atmosphere conducive to learning, the instructor may take disciplinary measures judged appropriate to protect the learning environment.
- All computers will be turned off before lecture starts. Print the slides in case you want to make notes during lecture. If any mouse or keyboard is used during lecture, I will ask the student(s) to leave the classroom immediately. Student(s) will be allowed to return in class with my permission.
- Please keep our classrooms clean. Pick up your trash and any other trash you see. This is our school and we want to keep it looking good.

**RESEARCH:**

From time to time you may be asked to participate in research studies conducted by other students or faculty. Generally this data is gathered through a questionnaire and individuals will not be specifically identified. All of these studies will have an appropriate learning context for the class. None will be psychological or dangerous in nature. Everyone will be briefed on the purpose of the study and anyone that wishes may have copies of the results.

**CHANGES TO SYLLABUS:**

This is a tentative schedule. Dates and assignments documented in this syllabus and the accompanying schedule of classes are subject to change at the discretion of the instructor. Every effort will be made to
provide any changes to the class in writing. Verbal notification at a class meeting, however, will constitute sufficient notice.

**NKU RESOURCES**

**NKU WRITING CENTER**

They will work with you on any college writing assignment, from a short response paper to a long research project. They will advise and guide you through the entire writing process – generating ideas, revising an early draft, editing and proofreading a final draft. They help you both write better papers and become a better writer! And it’s **FREE!**


**STUDENTS WITH DISABILITIES**

Students with disabilities who require accommodations (academic adjustments, auxiliary aids or services) for this course must register with the Disability Services Office. Please contact the Disability Service Office immediately in the University Center, suite 320 or call 859-572-6373 for more information. Verification of your disability is required in the DSO for you to receive reasonable academic accommodation.

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**Course Outline**

**Week 1:**
- Introduction to Mobile Application Development
- Download and Familiarize with the SMP SDK (SAP Mobile Platform).

**Week 2-4:**
- Create Web Service Application, Connection to SAP data, Hybrid Web Container Applications, Native Android Applications, Receive customer project.

**Week 5:**
- Midterm Project presentation

**Week 6-8:**
- Deeper application work, Seminars by industry experts and building out of customer project for final presentation.

**Resources**

**Software Developer Network from SAP**

Case Studies to be provided in class.
<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Projects Deadline</th>
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<tbody>
<tr>
<td>1 Aug 19</td>
<td>Class introduction, Load and Review SDK, Develop Employee Application</td>
<td>Aug 26</td>
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<tr>
<td>2 Aug 26</td>
<td>Weather Application Using Web Services</td>
<td>Sept 9</td>
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<td>3 Sept 2</td>
<td>Labor Day- No Class</td>
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<td>4 Sept 9</td>
<td>Travel Request using Databases</td>
<td>Sept 16</td>
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<td>5 Sept. 16</td>
<td>Sales Orders using GBI</td>
<td>Sept 23</td>
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<tr>
<td>6 Sept 23</td>
<td>Customizing Container Applications</td>
<td>Sept 30</td>
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<tr>
<td>7 Sept 30</td>
<td>Mobile Analytics using Databases</td>
<td>Oct 7</td>
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<tr>
<td>8 Oct. 7</td>
<td>Native Android Application</td>
<td>Oct 14</td>
</tr>
<tr>
<td>9 Oct. 14</td>
<td>Mid Term Present Project Plan</td>
<td>Oct 14</td>
</tr>
<tr>
<td><strong>10 -16</strong></td>
<td><strong>Develop Project</strong></td>
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<tr>
<td>Nov. 15-16</td>
<td>24 Hours Of Innovation</td>
<td>Nov. 15th &amp; 16th</td>
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<tr>
<td>17 Dec. 9</td>
<td>Project Presentation</td>
<td>Dec 9</td>
</tr>
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</table>
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