INFM 360 Special Topics in Information Management: ICAT
Android App Development
Spring 2017

Professor: Christopher W. Starr, PhD
Office: Room 102, Towell Library
Office Hours: 9-10:30 AM TR in ICAT room. Other times by appointment.
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Course time: 3:05 PM to 4:20 PM TR
Course location: Beatty 120
Co-work space: Beatty 120

Course Description
This course presents a range of advanced topics in information management providing a solid foundation of the theory and application of information management techniques and practices for which no regular course is offered.

Specific to this offering is that each student will learn and apply computational concepts for distributed application development and the tooling necessary to deploy an app in the context of business. Specific tools will be used for development and deployment of mobile apps, landing pages, AB testing, and so on (see below for complete list).

A maximum of 6 hours of special topics courses may be applied toward the business major elective requirement. (Prerequisites: Junior standing or permission from instructor).

Making A Profit, While Making A Difference
"Over the next fifty years, the greatest wealth creation will be driven by leaders who develop solutions for humanity and the planet" ~ Stuart M. Williams 1993

The Social & Environmental Entrepreneur-in-Residence at the College of Charleston is Stuart M. Williams. Mr. Williams is the Founder & Principal Member of The Impact Experts; Director of Be Earth Foundation, a United Nations IGO and Visionary & Founder of Intentional Investment Holdings, PBC. For more details, please see:
• @PeoplePlanetPft
• LinkedIn Profile
• www.swilliamsllc.com
Learning Outcomes

1. Learn a visual programming language and programming environment to build mobile applications.
2. Apply the programming language and environment to complete four mobile applications.
3. Understand and apply loops, branches, and sequences in computational thinking.
4. Understand and apply single-value variables in computational thinking.
5. Explain distributed computing architecture and specifically client-server architecture.
6. Use and apply Scrum as the agile framework for iterative project management.
7. Learn to use SaaS or installed tools for wireframes, prototypes, landing pages, AB testing and analytics.

School of Business learning goals for this course

COMMUNICATION SKILLS: Students demonstrate the ability, via both written and spoken word, to effectively present, critique, and defend ideas in a cogent, persuasive manner. Accomplished by: programming applications. Coding is precise communication to machines. Assessed by: four programming assignments

QUANTITATIVE FLUENCY: Students demonstrate competency in logical reasoning and data analysis skills. Accomplished by: The application of AB Testing Assessed by: AB testing analytics

GLOBAL AND CIVIC RESPONSIBILITY: Students identify and define social, ethical, environmental and economic challenges at local, national and international levels. Students integrate knowledge and skills in addressing these issues. Accomplished by: The ICAT commitment to impact entrepreneurship Assessed by: Implementation of technical solution that embodies the impact challenge

INTELLECTUAL INNOVATION AND CREATIVITY: Students demonstrate their resourcefulness and originality in addressing extemporaneous problems. Accomplished by: The act of creation of software including the GUI. Assessed by: The team software developed, including the landing page and design theme.

SYNTHESIS: Students demonstrate the ability to integrate knowledge from multiple disciplines incorporating learning from both classroom and non-classroom settings in the completion of complex and comprehensive tasks. Accomplished by: MVP development Assessed by: MVP’s operational level

Course Prerequisite
Acceptance into the ICAT Accelerator and permission of instructor

Required Textbook

Suggested Readings (optional)

Attendance Policy
Attendance and engagement is anticipated and mandatory by all ICAT students. However, please do not attend class if you are sick or believe you are becoming ill. Excused absences are expected.

Electronics Devices
The use of electronic devices, both stand-alone and network capable, will play an increasingly important role in teaching and learning at the College of Charleston, including their use in our classrooms. Bring your computing devices to class if you can, particularly your laptop with the charger. Just be smart about reducing unnecessary distractions to you and to others seated around you.

Tools Needed
1. A computer (Windows, Linux or Mac). Bring your own or use one in the library.
2. An Android phone/tablet would be nice to demo your software.
3. An Internet connection for access to people and information. WiFi available most places.

Graded Work by individual students (70 points total)
Four Mobile Applications (5 points each; 20 points total)
Each student will implement four mobile applications. Normally students will use AI2 as the language, but Java is also acceptable for Android apps and Swift for iPhone applications.

Ten Tech Canvases (5 points each; 50 points total)
A tech canvas captures specific information about one step toward technical implementation of a software or hardware product. A tech canvas is a Google form that will be filled out by each ICAT member. A URL will be provided in Slack each week to a particular canvas.

Graded Work by teams (30 points total)
Weekly Scrum Backlogs on team’s Slack channel (5 points)
Wireframe (5 points)
Prototype (5 points)
Landing Page (5 points)
Customer Factory Model (5 points)
MVP (5 points)
**Extra Credit (optional)**
+1 point for each ICAT Genius Hour and city-area meet-up attended.
   Genius Hour is a weekly, one-hour workshop.
+1 point for the number of additional mobile apps developed over four (up to 5 additional apps after the first four have been completed on time).
+2 points for each book read from the optional reading list.

**Penalty points**
Class participation
   Being in class, at meetings and meet-ups is the baseline for tech entrepreneurs in any accelerator, including ICAT. Engaging in class requires your full attention and interaction.
-1 point for missing class
-1 point for being late to class
-1 point per day for late personal (not team) assignments
-10 points per day for late team assignments

**Final Grade Calculation**
The total possible points is 100, excluding extra credit and penalty points.
The total possible extra credit points is 10 for Genius Hours and 6 for the 3 book readings.
The total possible penalty points is open ended, up to a forced withdrawal.

Final grade based on a 100 point scale =
Points for Individual work + points for teamwork + extra-credit points – penalty points

**Grading Scale from total points**
A: 90-100; B: 80-89; C: 70-79; D: 65-69; F: <65. Plus and minus grades are given at the discretion of the instructor.

**Academic Integrity**
Lying, cheating, attempted cheating, and plagiarism are violations of our Honor Code that, when identified, are investigated. Each incident will be examined to determine the degree of deception involved.

Incidents where the instructor determines the student’s actions are related more to a misunderstanding will handled by the instructor. A written intervention designed to help prevent the student from repeating the error will be given to the student. The intervention, submitted by form and signed both by the instructor and the student, will be forwarded to the Dean of Students and placed in the student's file.

Cases of suspected academic dishonesty will be reported directly by the instructor and/or others having knowledge of the incident to the Dean of Students. A student found responsible by the Honor Board for academic dishonesty will receive a XF in the course, indicating failure of the course due to academic dishonesty. This grade will appear on the student’s transcript for two years after which the student may petition for the X to be expunged. The student may also be placed on disciplinary probation, suspended
(temporary removal) or expelled (permanent removal) from the College by the Honor Board.

Students should be aware that unauthorized collaboration--working together without permission--is a form of cheating. Unless the instructor specifies that students can work together on an assignment, quiz and/or test, no collaboration during the completion of the assignment is permitted. Other forms of cheating include possessing or using an unauthorized study aid (which could include accessing information via a cell phone or computer), copying from others’ exams, fabricating data, and giving unauthorized assistance.

Research conducted and/or papers written for other classes cannot be used in whole or in part for any assignment in this class without obtaining prior permission from the instructor.

Students can find the complete Honor Code and all related processes in the Student Handbook at http://studentaffairs.cofc.edu/honor-system/studenthandbook/index.php

**Disability Accommodation**

Any student who feels he or she may need an accommodation based on the impact of a disability should contact me individually to discuss your specific needs. Also, please contact the College of Charleston, Center for Disability Services http://www.cofc.edu/~cds/ for additional help.