INFM 360.1 Special Topics in Information Management: ICAT
Android App Development
Spring 2018

Professor: Christopher W. Starr, PhD
Office: Beatty 306
Office Hours: MW 10 AM to noon. Other times by appointment.
Contact Information: starrc@cofc.edu
Office Phone: 843 953-8150

Course time: MW 2:00 PM to 3:15 PM
Course location: Beatty 120
Co-work space: Beatty 120

Prerequisite: Acceptance into the ICAT program.

Course Description
Students learn fundamental information technology concepts, processes and tools that drive business innovations resulting in local and distributed product and service solutions. Specifically, students will be introduced to solution design, prototyping, solution development and deployment, communication, and user-data analytics. Students end the course with a technology portfolio of installed and cloud-based platforms and services.

Learning Outcomes
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1. To apply the concepts of process creation, process composition and process orchestration.
2. To apply the concepts of information flow and process flow in business solution modeling.
3. To comprehend distributed computing systems with emphasis on client-server systems.
4. To synthesize business solutions as a product and as a service using a visual language and with supporting software tools.
5. To comprehend how information system data are captured, stored and processed, including user-interaction and social network data.
6. To apply an agile methodology for iterative project development, such as Scrum.
7. To apply an integrated, team communication tool, such as Slack.

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 Textbooks**
App Inventor 2: Create Your Own Android Apps 2nd Edition
David Wolber, Hal Abelson, Ellen Spertus, Liz Looney

Debugging Teams: Better Productivity through Collaboration 1st Edition
Brian W. Fitzpatrick, Ben Collins-Sussman

**Attendance Policy**
Class Attendance: Because class attendance is crucial for any course, students are expected to attend all classes and laboratory meetings of each course in which they enroll. Instructors maintain the authority to determine how absences will be addressed, which should be detailed in their attendance policies. Participation in college-sponsored activities, where students are official representatives of the College of Charleston, may result in absence(s). Instructors will recognize absences in which students are official representatives of the College of Charleston (such as intercollegiate academic or athletic team competition, or academic program
sanctioned research presentation or artistic performance) as excused. During the first week of classes, instructors will announce and distribute their attendance policies, including criteria to be used in determining excused absences. Instructors determine whether absences are excused or unexcused for the purposes of participation grades, in-class assignments, and laboratories. Regarding formal graded work (such as exams, presentations, papers), instructors will make “reasonable accommodations” when a student misses class for an event at which s/he is an official representative of the College of Charleston. Examples of reasonable accommodations might include: rescheduling an exam, altering presentation times, or flexibility in assignment submission dates. Students are required to submit documentation of their College representation related commitment from the appropriate College authority at least one week prior to the scheduled absence in order to be eligible for reasonable accommodations by the instructor. Regardless of any accommodation granted, students are responsible for satisfying all academic objectives, requirements, and prerequisites as defined by the instructor and the College. Instructors ascertain whether both excused and unexcused absences count in determining the basis for a grade of “WA,” which stands for “withdrawn excessive absences” and is equivalent to a failing grade. If attendance is used for grading purposes, the instructor is responsible for keeping accurate attendance records. If a student has more than the maximum allowed absences as defined in the course syllabus, the professor may assign a “WA.” Instructors are required to submit an electronic “WA” form (located in MyCharleston faculty tab) to the Registrar on or before the last meeting day of the class. The Registrar will then send an email notification to the student. The student is responsible for keeping personal addresses and contact information current through the Office of the Registrar. All students, whether absent or not, are responsible for all information disseminated in the course.

Electronics Devices
The use of electronic devices, both stand-alone and network capable, will play an increasingly important roll 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 and Suggested
1. A computer (MS Windows or Apple Mac). Bring your own or use one on campus.
2. An Android phone/tablet would be nice to test and demo your software. (not required)
3. An Internet connection for access to people and information. WiFi available most places.

Graded Work by individual students (66 points total)
Four Mobile Applications (4 points each; 16 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 application development.
**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 on Slack each week to a particular canvas.

**Graded Work by teams (40 points total)**
- *Weekly Scrum Backlogs* on team’s Slack channel (4 points)
- *Team chapter presentation (Debugging Teams)* (4 points)
- *Wireframe* (4 points)
- *Landing Page* (4 points)
- *Prototype* (4 points)
- *Domain name* (4 points)
- *Minimum Feature Set* (4 points)
- *Product Architecture* (4 points)
- *Customer Factory Model* (4 points)
- *MVP* (4 points)

**Extra Credit (optional)**
+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).
+1 point for each for attending Charleston Pitch Breakfast and 1 Million Cups events (up to 5 points).
+2 points for one of your apps on the Google Play Store.
+5 points for each book read from the optional reading list below. Maximum of two books.
Recommended as examples:

**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 points for being late to class
  - -2 points for missing class
  - -1 points per day for late personal (not team) assignments
  - -1 points per day for late team assignments

**Final Numeric Grade Calculation**
The total possible point count is 106, excluding extra credit.
The total possible extra credit point count is 10.
The total possible penalty point count open-ended, up to a forced withdrawal.
Final grade based on a 106 point scale =
Points for Individual work + points for teamwork + extra-credit points – penalty points

**Grading Letter Scale** (The final grade based on final numeric grade as a **percentage**, i.e., numeric grade normalized to 100)

<table>
<thead>
<tr>
<th>Points</th>
<th>Letter Grade</th>
<th>Points</th>
<th>Letter Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>≥ 94</td>
<td>A</td>
<td>73-75.99</td>
<td>C</td>
</tr>
<tr>
<td>90-93.99</td>
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<td>86-89.99</td>
<td>B+</td>
<td>66-69.99</td>
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<td>83-85.99</td>
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<td>63-65.99</td>
<td>D</td>
</tr>
<tr>
<td>80-82.99</td>
<td>B-</td>
<td>60-62.99</td>
<td>D-</td>
</tr>
<tr>
<td>76-79.99</td>
<td>C+</td>
<td>&lt;60</td>
<td>F</td>
</tr>
</tbody>
</table>

**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**

The College will make reasonable accommodations for persons with documented disabilities. Students should apply at the Center for Disability Services / SNAP, located on the first floor of the Lightsey Center, Suite 104. Students approved for accommodations are responsibility for notifying me as soon as possible and for contacting me one week before accommodation is needed.