PURPOSE/OBJECTIVES:
Advanced topics of complex Web-based and mobile software systems: programming methodology, software engineering, components, architectures, services, requirements analysis, design and development models, integrated development environments, testing, quality, platforms. Cross listed with CS 493. For cross listed undergraduate/graduate courses, the graduate level course will have additional academic requirements beyond those of the undergraduate course. Prerequisite: Graduate standing in CS or CIS, or senior standing in CS or CIS, or CS 390 or equivalent.

MODE of LEARNING and TEACHING:
Totally online (with NO face-to-face classes and/or meetings)

INSTRUCTOR: Dr. Vladimir Uskov, Professor
E-MAIL: uskov@bradley.edu

ASSIGNMENT: See course web site

TIMETABLE: See course web site

COURSE DELIVERABLES/OUTCOMES: See course assignment

GRADING SYSTEM (subject to change):
About 300 pts. are available to determine the grade as follows:

REQUIRED OUTCOMES
Part 2 outcomes: up to 100 points
Part 3 outcomes:
   Lab 1 outcomes: up to 50 points
   Lab 2 outcomes: up to 70 points
   Lab 3 outcomes: up to 80 points (if Web-based prototype works)

TOTAL: about 300 pts

OPTIONAL OUTCOMES
Lab 4 and Lab 5 together: up to 100 points (if and only if mobile software prototype works)

TOTAL POINTS OBTAINED GRADE
300-270 (1\textsuperscript{st} 10%-layer) A (100\% - 90\%)
269-240 (2\textsuperscript{nd} 10%-layer) B (89\% - 80\%)
239-210 (3\textsuperscript{rd} 10 \%-layer) C (79\% - 70\%)
209-180 (4\textsuperscript{th} 10%-layer) D (69\% - 60\%)
179-0 F (less than 60\%)

ACADEMIC DISHONESTY: In accordance with University guidelines, actions will be taken against students who engage in cheating, plagiarism, misrepresentation, fraud, or other dishonest practices. See Bradley University Policy on Cheating and Plagiarism at http://www.bradley.edu/campuslife/studenthandbook/policies/violations/cheating/