Software Systems Verification and Validation

Assoc. prof. dr. Andreea Vescan Lecture 12: Structure of the final exam +
Babeş-Bolyai University Agile Testing

Cluj-Napoca

2018-2019





Examination dates

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31.05.2018 – groups 932, 935, 936
7.06.2018 - groups 931, 933, 934
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Please come to the scheduled examination date with your own group! You will not be evaluated otherwise!

Grading

Grading (Tentative) – will be modified – Lecture 01

- F = 20% L +20% S + +10% Q + 50% E
 - L=lab; S=Seminar; Q=Quizzes; E=Written;
 - Bonus points! See the homepage of the course!
- Conditions to participate at the final exam
 - There is no restriction regarding the participation at the written examination regarding obtained marks at L, S, Q.
 - Laboratory activity: 3 out of 6 laboratories must be delivered.
 - Attendance lab (5 out of 6) -90%
 - Attendance sem (4 out of 6) 75%
 - Motivations
 - http://www.cs.ubbcluj.ro/hotarare-privind-motivarea-absentelor-studentilor-nivel-licenta/
 - Students will present the documents to motivate absences from the seminar/laboratory within one week from the date
 of absence.
- L/S/Q work may not be redone in the retake session.
- Students from Previous Years to 2018-2019 All the above rules apply to students from previous years.
- Conditions to pass/complete the SSVV discipline:
 - F >= 5 final grade.

Seminar

- Attendance: 4 out of 6 required
 - 20% of the final grade
- Required readings before seminars!
- Seminar structure
 - Assignment 1 10-minutes discussion on a given topic (the teacher is an observer!)
 - Assignment 2 60-80 minutes assignments on a given topic
 - Assignment 3 10 minutes quiz about required reading and seminar discussions.

Laboratory

- Attendance: 5 out of 6 required
- 20% of the final grade
- Lab structure
 - First hour of each lab current lab discussion, problem assignment and in-class problem solving.
 - The second our of each lab delivery of previous lab (exception first laboratory).
- Work in teams exactly 2 member per team.
- Lab grading for each laboratory (except the last one)
 - In class assignments! (3 points)
 - Take-home (Homework) assignments! (7 points)
- No more than two lab problems will be delivered in one lab meeting. An extra lab problem is delivered only if time allowed.
- Delay in lab submissions –2p from that lab grade.
- Maximum 2 weeks delay in submission of the homework assignment.
- Remark:
 - At the end of the semester all laboratory homework assignments must be saved on CD and given to the teacher.
 - Each time you deliver a laboratory the Deliverables of the in-class and take-home assignments must be uploaded in canvas.

Grading Gamifying Education

	Heroic Quests (quizzes)	Side Quests (Lab projects)	Social Quests (Seminars +Video Presentation)	Epic Quests (Final exam)
Normal session	300 XP	600XP Each Lab 100 XP (in-class 25XP+ take-home 75XP)	600 XP Each Sem 100XP (in-class 25XP + Quiz 75 XP)	Up to 1500 XP
Retake session	0 XP	O XP	0 XP	Up to 1500XP

XP intervals	Grade
[1400,1500]	5
[1501,1800]	6
[1801,2100]	7
[2101,2400]	8
[2401,2700]	9
Over 2700	10

- Final exam you must come (be present) to final exam in order to compute the grade!
- Bonus points = 300 XP (1p)
 - 200 XP activities during lectures
 - 100 XP Lecture 11 and Lecture 12 Presentations
- Bonus points = 300 XP (1p)
 - Research paper only if you (will) have 300 XP for Labs
 - Topic by teacher + 2 members/team + deliverables
 - Paper submitted to journal for review

Structure of the final exam

Take Home EXAM - 500 XP

- Solve at home and bring it at exam!
 - Take Home EXAM for each student canvas2 under Exam module.
 - 75 XP- Mindmap a SSVV notion (each student will receive a notion)
- 25 XP short question (each student will receive a question before exam)
- 150 XP long question (each student will receive a question before exam)
 - The answers to ShortQuestion and LongQuestion must be written by hand!
- 50 XP Study Assessment Methods at the "SSVV" discipline survey online one day before Final exam
- 200 XP Study Impact of Software Testing knowledge on performance in programming
 - 3 requirements to be implemented (no test cases, test cases by students, test cases by teacher provided)
 - Survey on line

In Class EXAM - 1000 XP

Structure of exam

Topics:

- 1) Inspection
- 2) Testing (BBT, WBT, Levels of testing)
- 3) Correctness (Floyd/Hoare/Dijkstra, Refinement)
- 4) Symbolic execution
- 5) Model checking

5*150 XP = 750 XP

Topic: IT firm presentations: Altom presentation, Evozon presentation, Endava presentation

3*50 = 150 XP

Topic: 1 General Questions

Sample type of questions:

- True/False proposition. Justify your answer.
- Fill in the missing information.....
- Multiple answer question.
- Time: 45 minutes for In Class Exam

• Thank You For Your Attention!