

PPL 2017 - Fasilkom UI

Summary of Study Guide

Please read BRP in Scele for details

Presented by: Ade Azurat

Enhancing Competitiveness Through Industry-University Partnership

- Keuntungan untuk Fasilkom UI
 - Membantu memahami perkembangan kebutuhan industri.
 - Membantu proses pembelajaran mahasiswa
- Keuntungan untuk industry/pengguna/client
 - Mendapatkan early exposure dan akses terhadap talent berbakat
 - Kesempatan berkontribusi kepada masyarakat
- Keuntungan untuk mahasiswa
 - Meningkatkan motivasi dan pemahaman mahasiswa
 - Mengenal langsung standar industri atau best practice terkini.



- > Semester: 6
- Credits: 6 SKS (Equivalent to study load of 17 hours/week)
- Strict Prerequisites:
 - Software Engineering
 - Database
- Weak Prerequisites:
 - Basic Programming Skill and Data Structures
 - Web Programming and Design
 - Computer Network

General Information

Credits: 6 sks (1 sks = 170 menit)

Individual weekly load equivalent to 17 hours work; divided into:

- Reporting (Writing and Presentation): 3 hours / week
 - ▶ 1 hour Individual evaluation and report writing (1 page/week)
 - > 2 hours Class room: (Guest) Lecturer / Group Presentation / Sharing
- Project works (Assignment): 11 hours / week
 - ➤ 10 hours Project works (based on backlogs, including: code, design, writing, etc)
 - > 1 hour Team meeting (supervised by assistants)
- > Self study: 3 hours / week
 - > reading
 - > tools adaptation
 - new technology exploration



- 1. Students able to plan, manage, implement and evaluate an IT Project
- 2. Students able to apply standard or best practices techniques of software engineering and IT Project Management
- 3. Students able to practice soft skills of software engineer
- 4. Students able to deliver a high quality and well developed running product.

Learning Objectives Main Goals

- 1. Working in team, Communication skill
- 2. Project Management, tool support
- 3. Product visibility, ideation
- 4. Development and Deployment, Continuos Integration
- 5. Software Testing, Quality Assurance
- 6. Maintainability, Changes management
- 7. Security, Privacy
- 8. Documentation
- 9. Scalability, Profiling

Learning Objectives Competence Topics

Week	Weekly Activities	Milestone/ Deliverables
1	Introduction, Brainstorming, review idea	Topics
2	Write proposal/Project Vision	Proposal/ Project Vision
3	Design wireframe	Wireframe + flow
4	Sprint plan 1	Product backlog
5	Development sprint 1	Standard Working environment
6	Development sprint 1	Git progress, code review
7	Development sprint 1	Git progress, code review
8	Sprint review 1, sprint plan 2	Executable prototype & Document
9	Development sprint 2	Git progress, code review
10	Development sprint 2	Git progress, code review
11	Development sprint 2	Git progress, code review
12	Sprint review 2, sprint plan 3	Publishable product & Document
13	Development sprint 3	Git progress, code review
14	Development sprint 3	Git progress, code review
15	Development sprint 3	Git progress, code review
16	Sprint review 3, deployment	Publishable Product & Document

Class Activities									
	Session 1 (Wednesday)	Session 2 (Thursday	/)						
8-Feb	Lecture by Dr. Eko K Budiardjo: Overview, Brainstorming	Workshop by Partners: Ideation	9-Feb						
15-Feb	Team Presentation: Product Proposal (incl. mock-up)								
22-Feb	By Partner+ TA, Lecturer: workshop Scrum + git	Lecture by Dr. Eko K Budiardjo: scrum, git	23-Feb						
1-Mar	by Lecturer+ TA: Team Review: Pro	duct backlog, Sprint Planning	2-Mar						
8-Mar	Individual Weekl	y Progress	9-Mar						
15-Mar	Lecture by Partner: Clean Code, Software Architecture	Lecture by Partner: Unit Testing, CI	16-Mar						
22-Mar	Individual Weekl	y Progress	23-Mar						
29-Mar	Team Review and I	Presentation	30-Mar						
5-Apr	Individual Weekl	y Progress	6-Apr						
12-Apr	Lecture by Partner: Security, Deployment	Lecture by Partner: Scalability, Profiling	13-Apr						
19-Apr	Individual Weekly Progress								
26-Apr	Team Review and Presentation								
3-May	Individual Weekly Progress								
10-May	by selected teams: Technology Sharing, Lecture by Dr. Eko K Budiardjo: Product Validation								
17-May	Individual Weekl	y Progress	18-May						
UAS	Team Review and I	UAS							

- Weekly individual report progress
- Contribution in team work
- Quality of work
- Learning effort
- > Tool proficiency
- Discipline
- > Application of knowledge and skill
- > Team and Individual Improvement
- Feedback from client or partner

Evaluation Criteria

- ✓ For each team:
 - ✓ Consist of 5 students
 - ✓ One TA (Teaching Assistant) supervises 2-3 teams
 - ✓ Topic chosen by team.
- ✓ Grading schema: (subject to change)
 - √ 20% Progress by teaching assistants
 - √ 30% Weekly Skill/Knowledge achievement and report by Lecturer
 - √ 10% Group Competences
 - ✓ 20% Project Contribution (peer, TA, lecturer review)
 - √ 20% Final Product Quality by Partners (during summer camp exhibition)
- ✓ Progress is evaluated by fill-in progress sheet by assistant and lecturer.

Class Arrangement for 2017

- a) Work on their own tasks as part of the team
- b) Self-study, learn and explore the latest technology
- C) Create a short weekly progress notes.
 - ✓ The notes should be made accessible by the lecturers, partners, and assistant.
 - ✓ The students are expected to spend at least 30 minutes to write notes every week.
 - ✓ The expected length of the notes is 200 500 words excluding other text from external source.
 - ✓ Respect other in writing your notes.
- d) Attend min the 1 hour weekly team meeting to do:
 - ✓ Team work and discussion, supervised by Assistant.
 - ✓ Daily Scrum Meeting
 - ✓ Preparation for Sprint planning or Sprint Review (if applicable)

What Students do weekly

> Content:

- ☐ What have you done
- ☐ What have you learnt (Main Focus)
- ☐ What problem did you encounter
- What are you going to do next

> Guide:

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- ✓ The students are expected to spend at least 30 minutes to write notes every week.
- ✓ The expected length of the notes is 200 500 words excluding other text from external source.
- ✓ Respect other in writing your notes.

Weekly Report

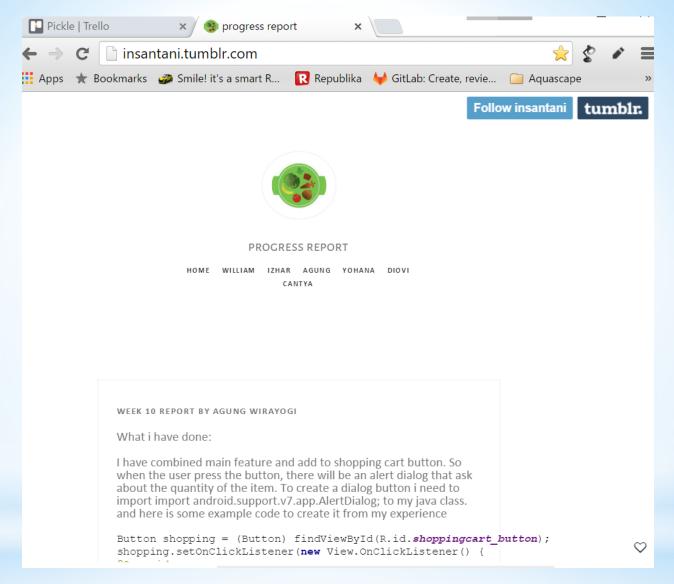
Student's weekly progress, is appreciated bi-weekly by lecturer. It is consisted of four parts.

- Part A is related to the knowledge and skills.
- > Part B is related to good practices in software engineering
- Part C is related to behavior attributes or soft skill
- Part D is related to group competences

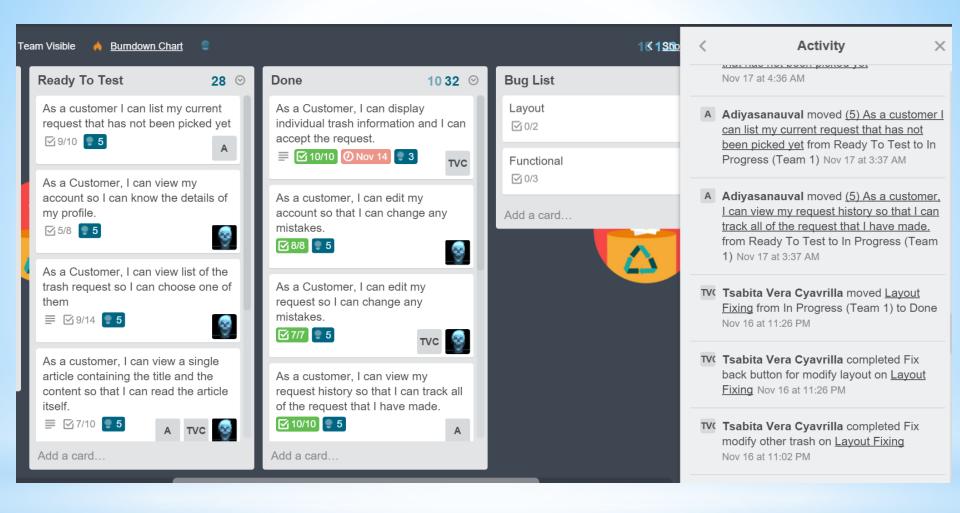
Bi-weekly Individual Appreciation

Monitoring Tools

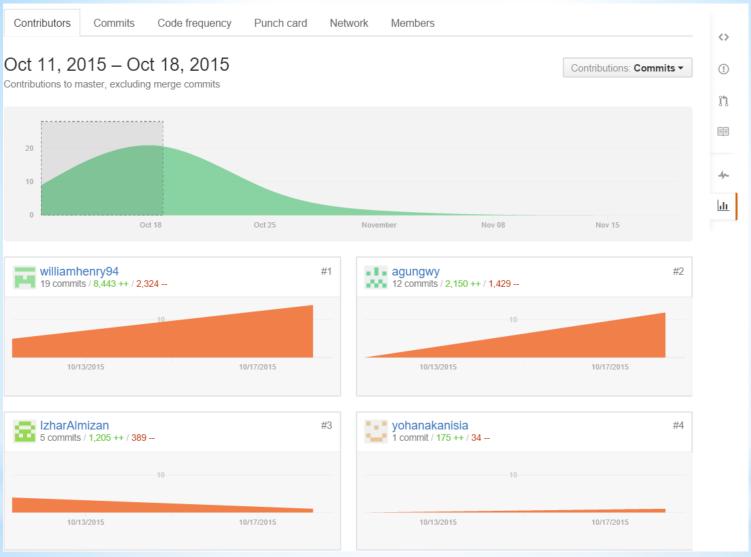
Progress should be documented well. Students claim should be justified by written evident.



Online Review & Evaluation



Online Review & Evaluation



Online Review & Evaluation

АВ	C	D	E	F	G	Н	1	J	К	L	М	N	0
Main Competences	Description or Sub-Competences	Tumo	Final Achievement							We	ek		
Wall Competences		Туре		1	2	3	4	5	6	7	8	9	10
Part A: Knowledge and Skills			(the highest score)										
Software Design	Webservices and API	Mandatory	4	0	0	2	2	3	3	3	4	4	4
Software Design	Design using standard tools (such as UML)	Mandatory	0	0	0	0	0	0	0	0	0	0	0
	Software architecture	Optional	0	0	0	0	0	0	0	0	0	0	0
	Object Oriented Design Best Practice	Optional	0	0	0	0	0	0	0	0	0	0	0
	Tool, and Technology overview	Optional	0	0	0	0	0	0	0	0	0	0	0
	Continuos integration:	Mandatory	3	0	0	0	0	0	0	0	3	3	3
	Concept:	Optional	2	0	0	0	0	0	2	2	2	2	2
	Programming (minimum 3 user stories)	Mandatory	4	0	0	0	1	1	1	2	2	3	3
Development and	Debugging (solving minimum 3 bugs reports or 3 change requests)	Mandatory	4	0	0	0	0	0	1	1	1	2	2
Deployment	Applying suitable algorithm and data structures	Mandatory	0	0	0	0	0	0	0	0	0	0	0
	Android Framework	Optional	3	2	2	2	2	2	3	3	3	3	3
	Framework:	Optional	0	0	0	0	0	0	0	0	0	0	0
	Build Script and software integration	Mandatory	4	0	0	1	1	1	1	1	2	2	3
	Cloud deployment	Optional	3	0	0	0	2	2	3	3	3	3	3
	Software testing Concept	Mandatory	0	0	0	0	0	0	0	0	0	0	0
	unit test, functional test	Mandatory	4	0	1	1	1	2	2	2	3	3	3
Software Quality	Tool:	Optional	0	0	0	0	0	0	0	0	0	0	0
Software Quality	Code Review	Mandatory	0	0	0	0	0	0	0	0	0	0	0
	Tool:	Optional	0	0	0	0	0	0	0	0	0	0	0
	Bug/Ticket Tracking	Mandatory	0	0	0	0	0	0	0	0	0	0	0
	Software Configuration Management	Mandatory	0	0	0	0	0	0	0	0	0	0	0
Maintainability	Tools:	Optional	0	0	0	0	0	0	0	0	0	0	0
	Refactoring	Mandatory	0	0	0	0	0	0	0	0	0	0	0

Weekly Progress Evaluation (shared with each student)

- Data dan persiapan dibantu dan didapat dari:
 - International Students of IT Project 2015
 - Regular Student of PPL-C 2016
 - Fauzan Helmi Sudaryanto
 - Niken Fitria Apriani
 - > PT. NostraTech
- Pertanyaan atau diskusi lebih lanjut bisa disampaikan pada Tim Dosen PPL 2017 yaitu:
 - Eko K Budiardjo (eko@cs.ui.ac.id)
 - Ade Azurat (<u>ade@cs.ui.ac.id</u>)
 - Maya Retno Ayu Setyautami (<u>mayaretno@cs.ui.ac.id</u>)
 - Gladhi Guarddin (<u>adin@ui.ac.id</u>)
 - Bayu Anggorojati (<u>bayuanggorojati@cs.ui.ac.id</u>)

Terima kasih