BUE
The British University In Egypt
الجامعة البريطانية في مصر

Software Project Management

Introduction to the Module

by Prof. Vladimir Geroimenko
Module Leader
25 September 2016

Module Teachers

Teaching Assistants

- To Be Added
- TBA
- TBA

Module Leader - 1

- Professor Vladimir Geroimenko

  You may call me “Dr Vlad”

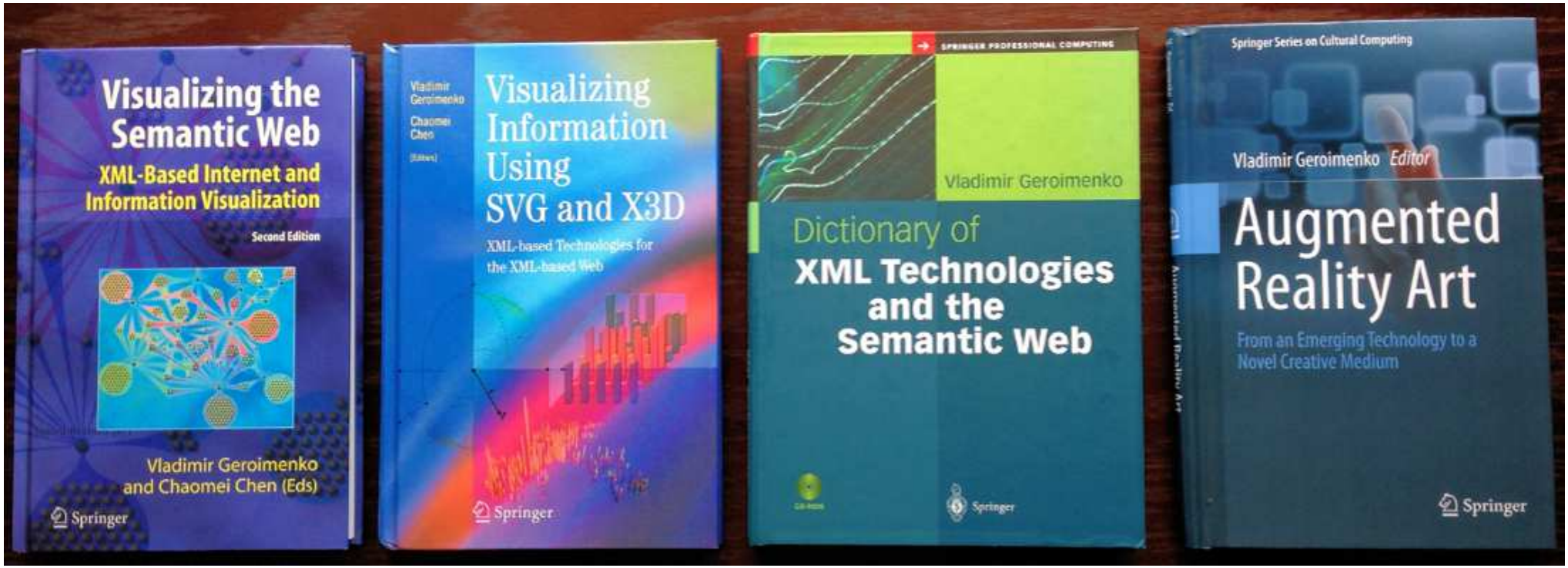
- British, was born in Belarus
- Education
  - MSc in Physics and Mathematics
  - PhD in Methodology of Science
  - DSc in Cognitive Sciences (‘Doctor of Science’ is the highest academic degree, the next after PhD)

Module Leader - 2

- Worked at
  - Academy of Sciences, Minsk, **Belarus**
  - Ruhr-University Bochum, **Germany**
  - Göteborg University and Chalmers University of Technology, Göteborg, **Sweden**
  - University of Plymouth, **England**
  - and … now with BUE, **Egypt**

Module Leader - 3

- Published 156 scientific works, including 14 books, 36 book chapters, 53 journal articles and 48 conference papers.



Module Leader - 4

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- **Office hours:** TBA
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Module Specification

Please note:

The original module specification and all other module documents are available of the E-Learning portal!

Module Code: 16CSCI08I	**Title:** Software Project Management
Modular weight: 10	**Examination weighting:** 60%
Prerequisite modules: CSSE01C	
Reassessment: No restriction.	
Module Leader: Prof. Vladimir Geroimenko	
Semester taught: 1	
Key words: IT Projects, Software Projects Development Life-Cycle, Project Planning and Management, Software Effort Estimation, Project Scheduling, Risk Management	
Date of latest revision: September 2016	

Aims

The aim of the module is to provide an understanding of the methodologies, considerations and issues particular to software projects management. The module delivers knowledge and hands-on experience of techniques practiced and tools used to plan and manage software projects at their different stages. The module further aims to build basic project management skills by highlighting the concepts of team building, organizational behaviour, motivational theories, and of the role of good management in the successful and timely delivery of software projects.

Methods of Learning, Teaching and Assessment

Total student effort for the module is 100 hours on average.

Learning and Teaching

Type of session	ILOs assessed	Student Effort		
		Number in the semester	Hours per week normally	Total hours
Lecture	1-3	12	2	24
Laboratory	4-7	12	2	24
Private Study	1-7			52

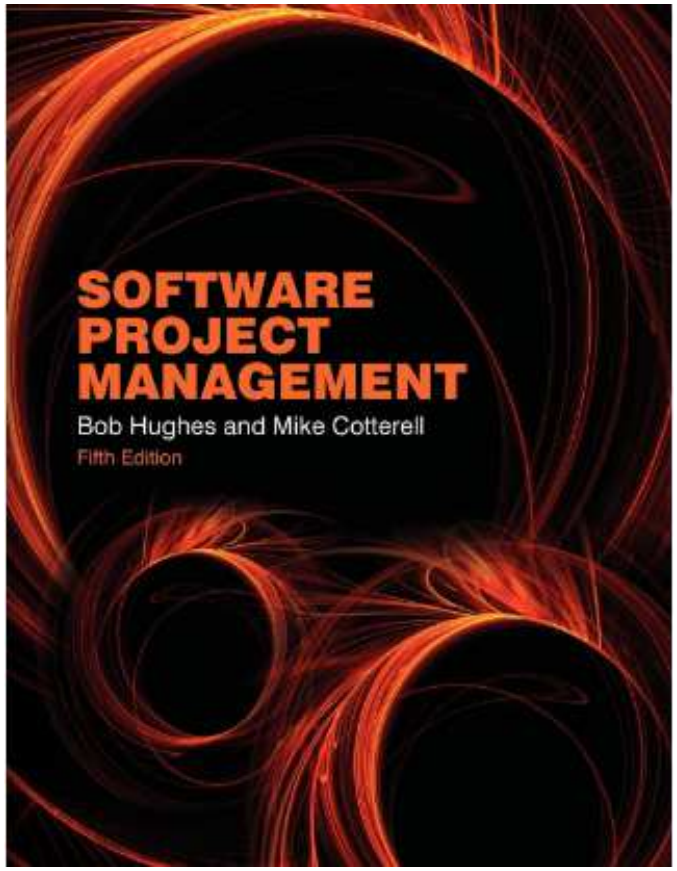
Assessment

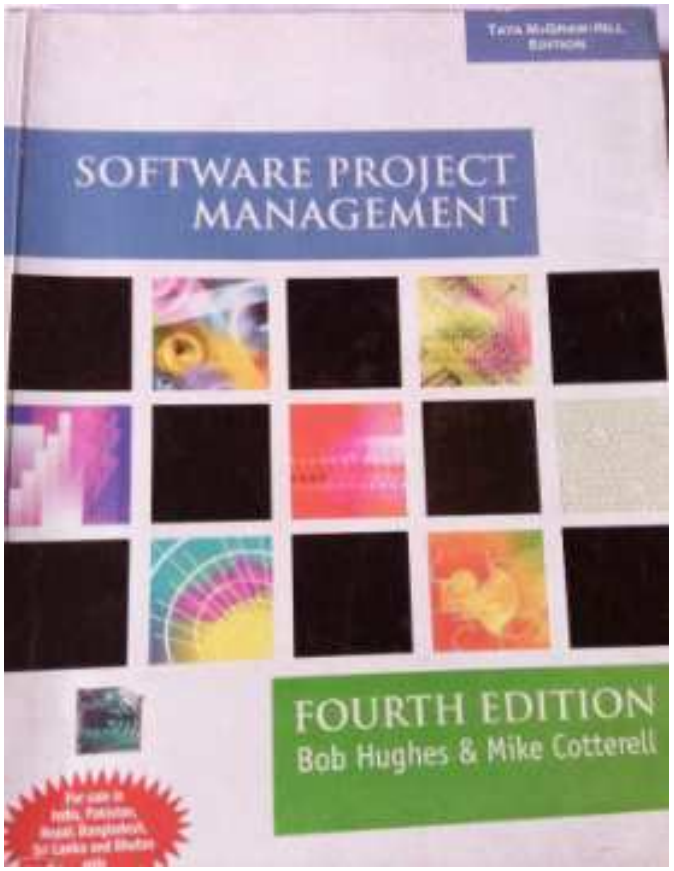
Assessment Focus	Weight %	Assessment Type	ILOs Assessed	Exam Semester	Exam/ Written Coursework Length
Group of 4 students	40%	A technical planning and development group project assessed by report (25%) and individual discussion (15%).	2-6	-	~2000 words
	60%	A 2-hour unseen written final examination	1-4	-	-

Indicative Reading List

- Hughes, B. and Cotterell, M. (2006), "Software Project Management", 4th Edition, McGraw Hill, ISBN: 0-07-710989-9
- Practical guide lines from the Software Program Manager's Network. Available at http://www.spmn.com
- The ITtoolbox Project Management Knowledge Base. Available at http://projectmanagement.ittoolbox.com

Textbook: 5th (2009) or 4th (2006) Edition





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5th edition

4th edition

Project Assignment

Informatics and Computer Science	Module Code: **16CSCI08I** Assessment Title: **SPM Project** Academic Year: **2016-2017**
Module Title: **Software Project Management**	
Module Leader: **Prof. Vladimir Geroimenko**	Semester: **One**
Assessment Weight: **40%**	Due Date: **3 phases, detailed below**

Project Specification:

You are required to form **a group of four students**. Each student in the team will play the following two roles:

- A manager role: he/she is responsible for planning and managing the development of one of the SDLC phases (analysis, design, implementation, testing) that are carried out by the other three team members;
- A team-member role: he/she is responsible for (possibly partial) implementation of the tasks assigned by the managers;

For example, if you choose to play the role of the design manager, you are required to put a plan for the design tasks, distribute these tasks among the other three team members, monitor and report their progress. At the same time, you will be a team-member in the analysis, implementation, and testing phases of the project.

Project Deliverables:

Date	Deliverable	Marks
Week 3	Project Proposal	15%
Week 8	Project Initial Plan	35%
Week 11	Final report along (with a partially developed system)	35%
Week 12	Presentation/ Discussion (10-20 slides if required)	15%

Specific details of each of this project deliverables will be given in due time.

Project – Phase 1

BUE The British University In Egypt الجامعة البريطانية في مصر Informatics and Computer Science	Module Code: **16CSCI08I** Assessment Title: **Project – Phase 1** Academic Year: **2016-2017**
Module Title: **Software Project Management**	
Module Leader: **Prof. Vladimir Geroimenko**	Semester: **One**
Assessment Weight: **15% of project mark**	Due Date: **Thursday 13/10/2016**

You are required to submit a project proposal that contains the following:

1. A cover with the project title and the names and IDs of 4 team members;
2. Project scope and objective (as detailed as possible);
3. Assumptions and constraints;
4. Adopted SPM method, software development methodology, required infrastructure and technology;
5. Project deliverables;
6. Team Organizational Structure throughout the project;

Deliverables	Mark	
Using Template (IEEE or PRINCE2)	2	
Narrative description of your development project and deliverables	3	
Project scope, assumptions, and constraints (suitable project idea, project size and good understanding of scope and constraints)	4	
Project Objectives (clearly specified and fit for the project scope)	3	
Correct, and justified choice of adopted SPM, SDM, technologies and infrastructure	2	
Team Organizational Structure	1	
Total	**15**	

Project – Phase 2

BUE The British University In Egypt الجامعة البريطانية في مصر Informatics and Computer Science	Module Code: **16CSCI08I** Assessment Title: **Project – Phase 2** Academic Year: **2016-2017**
Module Title: **Software Project Management**	
Module Leader: **Prof. Vladimir Geroimenko**	Semester: **One**
Assessment Weight: **35% of project mark**	Due Date: **Thursday 17/11/2016**

Each phase manager within a group is required to develop and document a detailed plan for the phase he/she is managing. An integrated plan for the whole project should be done by the whole group to coordinate or deliver activities **if needed.**

Your plan should include the following for the project as a whole, and/ or for each development phase (analysis, design, implementation, testing) as appropriate:

- WBS or PBS (Every team member needs to submit it for their phase)
    - Each team member has to choose two activities/ products from the implementation stage, and provide an estimation for: activity **size**, **effort** required, **cost** of activity.
    - Identify the numbers and type of staff required for the two activities/products. Include any special skills or experience that the staff allocated to a task needs to have.

Please note that **you have to** submit your work in the **IEEE or PRINCE2 template**. Fill in the required sections of IEEE, or use the supplied PRINCE2 documents.

Project Plan Marking Schema

Individual Work (35%)

ID	Name	WBS/ PBS (15)	Estimation (15)	Resource Allocation (5)	Total (35)	Comments

Project – Phase 3

BUE The British University In Egypt الجامعة البريطانية في مصر Informatics and Computer Science	Module Code: **16CSCI08I** Assessment Title: **Project – Phase 3** Academic Year: **2016-2017**
Module Title: **Software Project Management**	
Module Leader: **Prof. Vladimir Geroimenko**	Semester: **One**
Assessment Weight: **40% + 10% Discussion (of project mark)**	Due Date: **Saturday 10/12/2016**

Each phase manager, within each group, is required to develop and document a schedule and a risk assessment for the phase he/she is managing.

Each group is to deliver the final report of the project. This report has to follow a standard industry template (IEEE or PRINCE2), and includes the items detailed on the next page.

Quality not quantity. Marks are awarded for using the methodologies and tools, according to their appropriateness in your case, not for the complexity of the business scenario or unnecessary details included.

Requirements for Phase 3:

1. Front cover with project title, student names and IDs;
2. Table of contents;
3. Revised work from stages 1 & 2 (Group);
4. Schedule for each phase
    a. Precedence table for all project phases (Group)
    b. CPM network for each phase (individual)
    c. Gantt chart for each phase (Individual))
5. Risk assessment for each phase (Individual work)
    a. Table of up to 5 possible risks that could happen in the phase in general or to any certain activity within the phase in particular;
    b. Risk leverage and contingency plan for 2 risks of the identified risks;
6. Risk Planning
    a. For 2 activities in each phase, find out the expected time (most likely, pessimistic and optimistic times). (Individual)
    b. For these 2 activities, calculate the PERT equations: Expected duration & standard deviation. (Individual)

Marking Schema

(50%)

Name	Revised work [Stage 1] (7)	Schedule (15)	Risk Assessment (13)	Risk Planning (7)	Discussion (8)

1) Schedule (15 Marks)

Name	Precedence Table (5)	CPM Network (5)	Gantt chart (5)	Comments

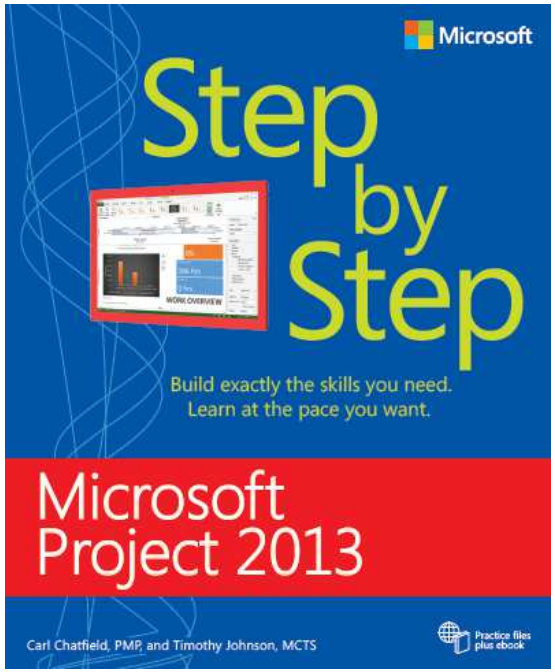
Software

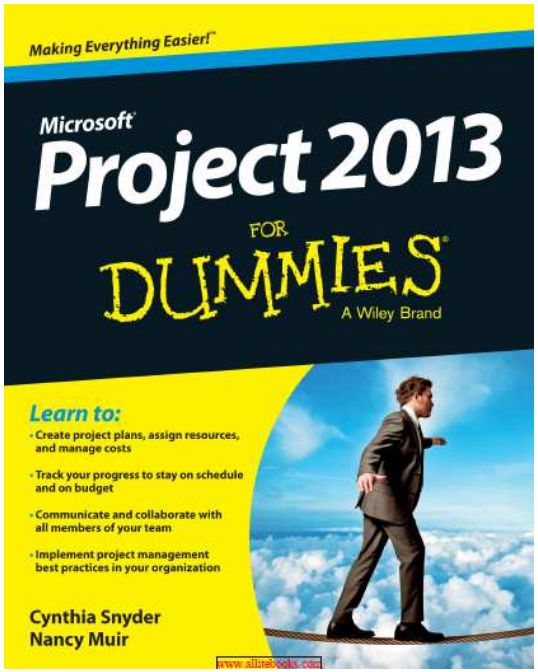
Software

- **Microsoft Project** is a project management software program that can assist a project manager in developing a plan, assigning resources to tasks, tracking progress, managing the budget, and analysing workloads.
- Editions:
  - MS Project 2010 - Old Edition
  - **MS Project 2013 - Edition installed in our labs**
  - MS Office 2016 - Latest Edition

MS Project 2013: Books and Tutorials

- Please note: Several are available on the Internet for free.





Weekly Teaching Plan

- Our main working document
- It can be slightly corrected during the semester
- The latest version is available on the E-Learning portal

Summary in Plain English: Why do you need this module?

Of course, not many of you will be employed full-time as “Software Project Managers”, but:

- Most or all of you will manage one or more different teams during your future working life;
- If you are going to set up your own company, project management skills are absolutely necessary for your success;
- If you apply for a manager’s job (of any kind), mentioning this SPM module is your CV can be very helpful;
- Finally, you can apply your project management skills to projects of any sort (for example, to organising a big marriage event :)

Thank you for your attention

Any questions, please?