Week1 :Introduction to course and to project management

During Week 1 we will be covering the following material:

- Introduction to the course
- Introduction to Project Management
- Project Management approaches and lifecycles
- Project Management Body of Knowledge (PMBoK)
- The role of the project manager
- Agile Project Management

Q1: Prodject Vs. Business-as-usual (BAU)

BAU no specified time-frame, life-cycle; it's about daily operation. Project has goal, solution, values, life-cycle, it's about change, an exception, a unique endeavor.

Q2: project management cycle Vs. Software lifecycle

PMC: from beginning to the end of software development.
SLC: the use length depend on requirement & demands.

Q3:Why do we use different methods to project management?

Traditional (Waterfall):
Benefits: for developing software system;
Risk: rework, requirement change quickly.
Incremental:
Benefits: less cost on requirement changes, better customers' engagement & feedback, early delivery of useful app;
Risk: process is less visible, less documenting, messy system structure
Integrative:
Benefits: stand-alone multi-purpose app, develop components for integration into a framework, standard web services

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Q4: What is PMBoK? Where does it fit within the daily management of software development?

Project management Body of knowledge. Improve project management and focus on software by initiating, planning, excuting, monitoring and controlling, and closing.

Q5:Fact or fiction: the PMBoK and agile approaches to project management are incompatible?

Fact. PMBok(PPT p11) is not method.it doesn't define input, out, roles, goals, workflow…(who, when, how,). It only identifies and describes the PM body of knowledge and offers common language within the professional practice. SCRUM is a method included by Agile.

Q6:Why do organisations manage projects?

Increase the likelihood of success: know goals, constraints, motivation, good risk management

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Q7:What are the key attributes of a good project manager and why are they important?

Communication, leadership, decision maker, technical expertise, (no office political involve)

Q8:What is Agile project management (APM)?

an iterative and incremental approach to delivering requirements throughout the project life cycle.

Week 2: Intro to critical thinking with Tess Snowball (ASLC), Communication, Teamwork

Learning objectives

- The importance of communication to successful project outcomes
    - Stakeholders

Q1:If a team is a "group of people formed to achieve a common goal" is the people who work on the same shift at, say, McDonalds a team?

Normally, they just do their own tasks, their own goal, but sometimes connect to each other's. If there is a common goal for the people who work on the same shift, then it's the same team.(Justify Answers)

Q2:Does an understanding of teamwork help you become a better team member?

Yes. I worked in a team that everyone did their own thing and we did get good marks, then I learned about teamwork. The next team I was a member of, got really good marks and I think it was learning about team work that made the difference.

Week 3 - Communication & Teamwork

Learning objectives

- Communication and teamwork (continued from last week)
- Project leadership vs project management
- Project context and initiation (to be continued next week)
- Through participation in the workshop session:
  Understanding teamwork and individual teamwork styles

Q1: What impact do poorly developed people skills have upon project success?

When project manager/leader has poor people skills, the decision od assigning a job to people may not be accurate, we need to communicate to make good decisions btw values and people. (Delivery with RIGHT value!!)

Q2:Is it more important that …

The team leader/manager has good interpersonal skills.

Q3:If "managers are people who do things right and leaders are people who do the right thing," what is likely to happen when a project is managed well but is not provided with leadership?

The project will do everything that it does well and within the specified time-frame and resources, but the project is unlikely to deliver the hoped for value because without leadership the project may not end up delivering what is really required to deliver value. (Leader ship offers Value!!!)

Q4:Which are more likely to have an impact on project success: internal or external factors?

Internal Case:

External Case:

Q5:Why are feasibility studies conducted?

To decide whether the project should go ahead or be cancelled before it has begun n, and if it is to go ahead, does it need to be change?

Q6:What is likely to happen when you do not conduct stakeholder analysis at the start of the project?

Waste too much time on low power stakeholders (but don't ignore low power stakeholders). By looking after the stakeholders with high power, use them to get resources support for my project. Know what stakeholders want, know who block the project, destroy my position and support the project.

Q7:How can considering factors that lead to project success before the start of the project help you achieve success?

Because I know, for example, that researcher has identified that it is important to control the scope of the project if my project is to be successful,, then I can make sure throughout the project I take steps to control the scope. I can do that for all the factors considered critical to success. List factors can help improve my project, I need to know when to cancel the project.

Q8:Project scope and product scope are really the same thing.

NO.
Project Scope: 'How' work oriented, to delivery product.
Product scope: 'What' function oriented, to delivery features that characterize a Product?

Q9:Why is determining the scope of the project important?

Without knowing the scope of the project it is impossible to plan.

Q11:Why would you create a project charter?

It provides standards for team performance which can be used by HR or the project manager when managing team performance.

Week 4 - Project Initiation + Planning to keep the big picture in mind

Q1: Why do we need to move the software development process from focusing on outputs to focusing on outcomes?

Output is about the artefacts created rather than on delivering value.
Outputs (The amount of something produced by a person, machine, or industry)
Outcomes (The way a thing turns out; a consequence. About value!! Customer cares!!)

Q2: Myth or Fact: Agile projects are not really concerned about scope?

Myth. Agile all about scope (product backlog) and do the right thing.

Q3: Are agile user stories and traditional requirements the same thing?

NO

Q4: Myth or Fact: best practice requires that a user story is written using the template? Why?

FACT: “As I want so that”

Q5: What is it about user stories that promote collaborative development?

“As I want so that” is brief and by this, we have talked to people and work out what is required

Q6: Why would you express the product backlog visually rather than textually?

It’s easier to see the big picture when the scope is expressed graphically than when in flat text

Week 5 - Planning to keep the Big Picture in Mind (continued) + Project Planning

Learning objectives

- Critical thinking & Reflective writing
- Project Planning
- Minimal Viable Product (MVP)
- Epics (Large User Stories)
- Goal driven product backlogs (aka User Story Maps)
- Through participation in the workshop session:
    - Activities surrounding the
        - development of a business case
        - cost - benefit analysis

Q1: What does the quote by J.M. Keynes “***It’s better to be roughly right than precisely wrong***” tell us about project management?

I need to recognize that no matter how hard I try to plan the project I cannot know everything at the beginning so my plan will ever only be “roughly right”.

Q2: What happens when projects are not managed?

Development will go over time and budget, won’t about to delivery requirement
In bad management: delivery date be later and later but development team is working more and more overtime.

Q3: What are the principal differences between the agile project management lifecycle and the traditional project management lifecycle and why are they important?

The agile lifecycle is all about “just in time” That means that things are only done when they are needed which tread to cause a focus on ensuring that whatever is done delivers real, measurable value.

Q4: What happens when agile project planning is not carried out in order?

Skipping a planning level leads to confusion because the timeframe is wrong and the tasks are the wrong size for estimation.
The first thing is for the client and product owner to produce the road map which includes the date for each release, The roadmap is then givens to the software development team who use it to make sure they include the right features in the release.

Q5: Effort and duration are just different terms meaning the same thing.

False.

Q6: How does the creation and use of a User Story Map help manage a project so that it delivers real, measurable value?

Because it is visual tool: client or team member –can understand it and can see what needs to be done. It helps priorities stories so that will delivery highest value to the client are always developed first. It's a tool; helps the team collaborate and discuss exactly what is needed, rather than the project manager coming up with a plan which is then imposed.

Week 6 - User Story Estimation

Q1: In Agile Project Management (APM) what does "ready" mean?

A story that is clearly defined and all team members understand what needs to be done, has no external dependences meets the INVEST criteria and can be completed **in less than a single iteration** is "ready"

Q2: Why is it important that a team only include "ready" stories in the sprint backlog?

As "ready" stories can be more accurately estimated and developed, the project is more likely to remain within budget and to deliver value.

Q3: What does the term "done" mean in Agile Project Management?

It's about quality not approval from external parties.

Q4: When decomposing a large user or epic story, what is the right size for a story?

The right size is something that the development team can complete in less than a single iteration.

Q5: Why would you include testers in a User Story Workshop?

Because testers often take a different approach from developers and so you get better coverage of thing like data validation and business rules implementation.

Week 7 - End-to-End Experience and MVP

Learning objectives

- Understand and explain the importance of adopting an "end-to-end experience" approach to development

- Understand and explain the concept of minimum viable product
- Understand and explain how to use a user story map to help deliver the minimum viable product for each iteration, release, and the whole product

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Q1: What is meant when you're told you need to plan for the "end-to-end experience"? Planning for the end-to-end experience means …

Planning to provide the user with a completely seamless experience that completely matches user needs and expectations.
Understand and implement all features the user will need to make the product useful and therefore valuable to them. Understand what is required from the use's point of view, which means understanding the context of the problem, just as much as the problem itself. Taking time to understand the problem from the users' point of view to make sure that all the features required are integrated seamlessly. (Customer's values perspectives!! Not relevant to this question)

Q2: How does focusing on the big picture help develop an end-to-end experience?

Understanding the big picture helps to see the environment in which the product will be used and why it is going to be important for users.

Q3: Think about the image "understanding the cost of change". Does it apply to agile project management approaches?

Traditionally managed project experience higher costs associated with change the longer the project has been running, however, agile approaches welcome change, so the cost of changes remains pretty constant throughout the project. In the traditionally managed project, stakeholder are more likely to be able to influence the project at the start. However, in an agile project, stakeholders are involved all the way through so they can exert influence at any point.

Q4: Complete the following sentence. The minimum viable product is …

The smallest solution release that successfully achieves its desired outcomes. A solution (software) focus on customers' needs.

Q5: Can the use of user scenarios help you develop the MVP?

Yes. Because they help to imagine how the system might deliver what the users say they want and uncover the thigs the users don't say they want.

Q6: How do user story maps show the big picture?

Because, when taken as a whole, a user story map tells the story of the people who will use the system and what they do in order to create and manage its content and behavior.

Week 8 - Estimation and Velocity

Learning objectives

- Understand and explain how to use a user story map to help deliver the minimum viable product for each iteration, release, and the whole product
- Through engaging with our guest lecturer Brant Trim (Agiler), gain an understanding of working as an Agile Project Manager or team member in a real workplace.

- Understand and explain the importance of estimation to overall project success
- Understand and explain the difference between absolute and relative estimation approaches and units of measure

- Through participation in the workshop, demonstrate understanding of MVP, and how to use the USM to determine the MVP.

Q1: Estimation is just guessing. True/False

False

Q2: What is the main reason we estimate?

To ensure deliver value to client: To promote collaboration and understanding among team members. To work out how long the project should take and its likely cost, and resources

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Q3: Who should do the estimation?

The whole team(members + PM) and the client.

Q4: When estimating in agile project management you should always use story points True/False

False (You can have T-shirt size…..many others)

Q5: Should you estimate size or duration?

Size. Use schedule to convert duration to size.

Week 9 - Survival Concepts - Project Execution and Control - Dealing with Reality

Learning objectives

- Understand and explain the benefits of estimation conducted using planning poker and explain how to conduct a round of planning poker
- Understand and explain velocity, how to calculate it, and how velocity is used when deciding on iteration length
- Understand and explain why it is important to stay in control of the project
- Understand and explain how to the issues that a project is likely to encounter can affect its progress and eventual success or failure
- Understand and explain the agile schedule through release and iteration planning
- Understand and explain how to use agile project metrics to help track and control project execution, and how to report progress
- Through participation in the workshop, demonstrate meaningful user story estimation using relative units of measure and planning poker, and how to translate the size of a project in story points into time so that the length of time can be estimated

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Q1: After estimating the size of the stories in the project, the team needs to estimate its velocity, i.e. the number of story points it can complete in a single iteration.

True

Q2: 90 story points @ 10/15 story points per iteration = how many iterations still to go?

90 / 10 = 9 90 / 15 = 6

Q3: When you discover that the team's velocity has changed more than a few points between iterations you need to re-estimate the stories.

False; If only velocity increase, don't re-estimate, because the amount of required remain the same. You just need to do it faster.
When you have new understanding on story.

Q4: Iterations on all projects in an organization are always the same length.

False; iteration in a project is different from organization one. Organization has multiple projects with diff iterations. But project has only 1 length, each iteration has standard fixed-length time box, 1 - 4 weeks (best 2 weeks).

Week 10 - Release Planning

Q2: Why do agile approaches recommend that the project plan should be revised prior to the start of each release?

Because the ,ore times we plan the project, the better we will get – as we learn more about the project so our planning and estimation will improve and become more accurate.

Q3: What is the difference between the release and the iteration plans?

Release planning
The release plan looks forward through the product for some months out from the start
Iteration planning
The iteration plan looks ahead ONLY for the period of the iteration.
During iteration planning user stories are decomposed into tasks and estimation is in hours rather than story points. Iteration planning helps to refine understanding and leads to discussion about the product and the software design.

Q4: Which approach to iteration planning leads to higher levels of team engagement?

Commitment-drive: at the beginning, we don't have velocity, so choose this.

Q5: Iteration Retrospectives are the first thing done in an iteration: True/False

False. It's the last thing in an iteration.

Q6: Each release in a project is always of the same duration and always contains the same numbers of iterations? True/False

False. It can be vary.

Q7: What is project governance and why is it important?

Week11- Quality & Risk Management

Learning objectives

- Presenting and Communicating
- Quality management
  - What is quality software?
  - How to achieve quality
  - The importance of "done"
- Risk management
  - Risk planning
  - Risk review
  - Risks versus issues