

Module 1: Assessment (Graded)

1.Question 1

What term corresponds to the definition, “a duty that a person takes on or plays”?

2.Question 2

Which of the following is an example of a milestone?

3.Question 3

What does an uncertainty space diagram measure?

4.Question 4

When a product is built, what would you expect the ends uncertainty and means uncertainty to be?

5.Question 5

What does a Work Breakdown Structure represent?

6.Question 6

What can a Work Breakdown Structure be used for? Select three answers that apply.

7.Question 7

_____ is what you are agreeing to deliver. _____ is a guess for the time it will take for your development team to complete a task. _____ is a point in the schedule to meet.

8.Question 8

Which of the following are non-negotiable? Choose all that apply.

Peer-graded Assignment: Module 2: Release Planning (Graded)

RUBRIC

Was each sprint assigned 20 story points or less? (and no less than 17 story points)

1 pt Yes

0 pts No

Were all 'Must Do' priority user stories scheduled to be completed before any 'Should Do' user stories?

1 pt Yes

0 pts No

Were all 'Should Do' priority user stories scheduled before any 'Could Do' user stories?

1 pt Yes

0 pts No

Did Sprint 1 contain all of the High Risk/High Priority user stories? (These are user story #5 and user story #19)

1 pt Yes

0 pts No

Are all High Risk/Low Priority user stories placed in the backlog? (This is user story #13)

1 pt Yes

0 pts No

Did the learner identify at least 10 dependencies?

4 pts 10 (or more) dependencies were identified.

3 pts 7-9 dependencies were identified.

2 pts 4-6 dependencies were identified.

1 pt 1-3 dependencies were identified.

0 pts No dependencies were identified.

For each dependency that the learner identified, did all dependent user stories appear after (or in the same sprint) as the user story that it was dependent upon? *(i.e. If user story B is dependent on user story A, did user story B appear in a sprint after (or in the same sprint) as user story A)*

3 pts Always - All dependencies were accounted for correctly.

2 pts Usually - Most of the dependencies were accounted for correctly.

1 pt Rarely - Some of the dependencies was accounted for correctly.

0 pts Never - None of the dependencies were accounted for correctly (or the learner did not identify any dependencies).

Is an accurate total number of story points within each sprint provided?

1 pt Yes

0 pts No

Does each user story assigned to a sprint include the original user story ID# as well as the written description of the user story?

1 pt Yes

0 pts No

Module 2: Assessment (Graded)

1.Question 1

Why is it suggested that story point values be chosen from a Fibonacci sequence?

2.Question 2

Suppose completing user story A is estimated to be 2 story points. Relative to that, completing user story B is estimated to be twice the effort. How many story points are needed to complete both user stories? Use a Fibonacci number for each user story estimate.

3.Question 3

Within a sprint, suppose a user story estimated at 13 story points is partly completed. The developers say the work for it is half done. How many story points would the partial work contribute toward their velocity for the sprint?

4.Question 4

A development team estimates their velocity to be 15 story points per sprint, based on data from a similar project with the same developers, type of software product, and sprint duration. For the current project, after the first few sprints, their actual velocity was calculated to be 12 story points per sprint. What should be done for the next sprint?

5.Question 5

A development team is planning their fourth sprint, and have three prior sprints of actual velocities. To estimate their velocity for the upcoming sprint using this data, what issues should their estimation technique address? Choose the 2 that are correct.

6.Question 6

Suppose there is a project for a software product with an inception phase followed by 5 development sprints, ending with a target date to present the product at a trade show. What needs to be flexible to apply Scrum to plan this project?

7.Question 7

Besides task planning, how can Gantt charts be adapted to do release planning? Choose the 2 that are correct.

8.Question 8

Release planning considers the priorities of the user stories in the product backlog, where "should do" means ____, and "could do" means ____.

Module 3: Assessment (Graded)

1.Question 1

Suppose, at the point in a project when requirements are elicited, the variability of estimates is 0.5x to 2.0x. And, at the point when potential approaches are formulated, the variability of estimates is 0.8x to 1.25x. You just started eliciting requirements for an app, and the development team estimates the activity to formulate potential approaches would take 2 days. What should be used as the estimated time to complete this activity?

2.Question 2

In estimating the duration to complete a project, the optimistic duration is 3 days, the pessimistic duration is 15 days, and the most probable duration is 6 days. What is the interval that would contain the actual duration about 95% of the time?

3.Question 3

For a software requirement, a development team is planning a task to write the implementation code and a task to write and run unit tests for that code. The two tasks can happen in parallel, but they specifically want some of these tests ready before writing the implementation code. What kind of task dependency is this between the coding and testing tasks?

4.Question 4

A software product manager has a task to analyze the usage data for the features of a web application. After that task is done, there is a task to decide which popular features to incorporate into a mobile version of the application. What kind of task dependency is this between the analysis and decision tasks?

5.Question 5

In a CPM chart, the ____ represented tasks, while in a PERT chart, the ____ represented tasks.

6.Question 6

In a PERT chart, the nodes represented milestones. When multiple tasks lead directly out of a node, what does that mean?

7.Question 7

For a project, the critical path from beginning to end, has ____.

8.Question 8

In Scrum, an iteration plan is generated in a ____ meeting. The developers break down each user story into ____ with estimated times, which are ____.

Module 4: Assessment (Graded)

1.Question 1

An anti-pattern is a ____ occurring solution or situation in projects, with ____ consequences.

2.Question 2

The project for a software product is stuck in the specification phase, waiting for the product requirements to be perfected. Which anti-pattern is this?

3.Question 3

The project for a software product has separate teams that do not communicate well with each other, leading to an incoherent product. Which anti-pattern is this?

4.Question 4

The development team is deciding between two data compression libraries for a mobile app. To avoid groupthink and make an effective decision, what should the team do?

5.Question 5

Which of the following would be an indicator of a fire drill anti-pattern?

6.Question 6

Suppose a mobile application has a growing user base and the underlying server-side platform is not scaling with the demand. What main type of risk is happening, which could cause the product or project to fail?

7.Question 7

From the version of the impact versus likelihood matrix presented in the course, a risk with low impact and high likelihood would be a ____ risk. A risk with high impact and medium likelihood would be a ____ risk.

8.Question 8

Backed by market data, a software product manager wants a new video game to support the iOS mobile platform, natively. The past games by the development team were Android apps. In a risk plan, there is a risk identified and indicated that the development team is inexperienced with iOS. What would be a suitable action for this risk?

Course Final Assessment (Graded)

1.Question 1

On an uncertainty space diagram, if you have low means uncertainty, what does that indicate?

2.Question 2

On an uncertainty space diagram, what does the navigation path depict?

3.Question 3

On an uncertainty space diagram, from high means and high ends uncertainty, a waterfall process would tend to navigate toward which way initially?

4.Question 4

For a software product, what is an effective initial basis to form a work breakdown structure for its implementation?

5.Question 5

What would be a useful way to determine the specific project risks for a software product?

6.Question 6

A software product team is applying Scrum, and is breaking down the work for a user story into required developer tasks. They have identified an implementation task to write the source code.

To meet a typical definition of “done” for this user story, which other tasks should be identified?

7.Question 7

A software team is breaking down the work for a user story into required developer tasks. They have identified a task to add a section to the user manual for the feature. They also have a task to spellcheck the new section. Would this be appropriate?

8.Question 8

A development team thinks that it should take them four months to complete everything that the client has asked for. The client wants it delivered in two months, on New Years Day. The development team and client determine that they will complete half of the requested requirements. Which of these is the commitment?

9.Question 9

What are story points?

10.Question 10

What are the consequences of having an inflated story point estimate for a user story?

11.Question 11

How do you calculate the actual velocity of a team for a sprint?

12.Question 12

A development team calculates their velocity to be 20 story points in their recently finished sprint. They had completed a user story estimated at 5 story points. However, later in the project, it is noticed that the user story needs some enhancements, estimated at 1 story point. How should their previously calculated velocity be revised?

13.Question 13

In release planning, what user stories should be planned first for development in the earliest sprints?

14.Question 14

Suppose, while release planning, the total number of story points of user stories chosen for the next sprint exceeds the development team's estimated velocity. What should be done?

15.Question 15

In release planning, a development team estimates their velocity to be 20 story points. For the next sprint, they plan to finish 2 high priority user stories of 5 story points each. With 10 story points left, which of the following combinations of user stories should they choose (assuming the stories are independent and equal risk)?

16.Question 16

Suppose a release plan has a user story to be completed in the current sprint. At the end of the sprint, however, the tasks for the user story have not started. How should the release plan be updated?

17.Question 17

What does the cone of uncertainty mainly illustrate about estimates?

18.Question 18

A team of 3 developers is estimating the time to complete a user story. One developer forms an estimate by determining the tasks needed, estimating their times, and deriving a total. Another developer implemented a similar user story for another product, and derives an estimate based on personal experience. The third developer looked at another user story with the same number of story points and used its time estimate. How should they come to a final estimate?

19.Question 19

In estimating the duration to complete a project, the resulting interval that would contain the actual duration about 68% of the time is 14 to 24 days. What is the interval that would contain the actual duration about 95% of the time?

20.Question 20

For a software requirement, a development team is planning a task to write the implementation code and a task to inspect a reviewable version of the code for defects. After the inspection, the coding task addresses the discovered defects for the final version. What kind of task dependency is this between the coding and inspection tasks?

21.Question 21

A product support team has a long-term task to operate version 1 of an invoicing service. Version 2 is almost ready for to replace version 1, so another long-term task is planned to operate that version. The service must be available at all times, so if version 2 is not in place, version 1 is used. What kind of task dependency is this between the version 1 and version 2 operations tasks.

22.Question 22

In a PERT chart, the nodes represented milestones. When multiple tasks lead directly into a node, what does that mean? Choose 2 responses.

23.Question 23

Suppose for the tasks of an iteration plan, the critical path from begin to end to implement the user stories for the sprint has a total duration of 80 hours. There is an independent path from begin to end to prepare training materials for a separate set of features, and there is 16 hours of slack on that path. How much time is planned to prepare these training materials?

24.Question 24

Suppose while iteration planning, the total story points for the user stories of the sprint is below the estimated velocity, but the total estimated task hours for the tasks of these stories is above the available time for the team members. What should be done?

25.Question 25

Within a sprint, for a user story, one developer finished their tasks earlier than expected, allowing some spare time. What should the developer do with the spare time?

26.Question 26

At a development meeting to decide the underlying technology for a software product, one of the developers used their expert knowledge about one technology to pressure the rest to use it. The other developers are not convinced, but to avoid conflict, decide to follow using this technology. Which anti-patterns are happening here?

27.Question 27

The development team is deciding between two platforms for a software application. One involved proprietary tools around a proprietary language, and the contract would create a long-term relationship that would allow a relative of the team lead to profit. The other platform is open, with alternative tools. Which anti-pattern results from choosing the first platform?

28.Question 28

A development team decides to tune an existing algorithm for more speed rather than implement a better algorithm. One developer disagrees with the decision and works on the new algorithm without telling anyone. The new algorithm is taking a lot of effort, which results in not finishing other tasks, and planned user stories are not being completed for the sprint. What could the team have done to avoid this? Choose the two that are correct.

29.Question 29

For risk planning, an impact versus likelihood matrix combines a ____ and ____ to derive a single value of its ____, reducing 9 combinations into 3 categories to consider.

30.Question 30

For a project, the developers will follow Agile practices and the Scrum methodology. The impact of running out of funding for further development is relatively ____.

31.Question 31

Suppose a Scrum development team for a software product is located across two sites, 3 time zones apart. In a risk plan, there is a risk identified and indicated of poor remote communication. What would be suitable actions for this risk? Choose the two that are correct.

32.Question 32

An experienced Agile team is forming a release plan, and there are two user stories, both with high value. However, one user story is low risk and one is high risk. Which should be done first and why?