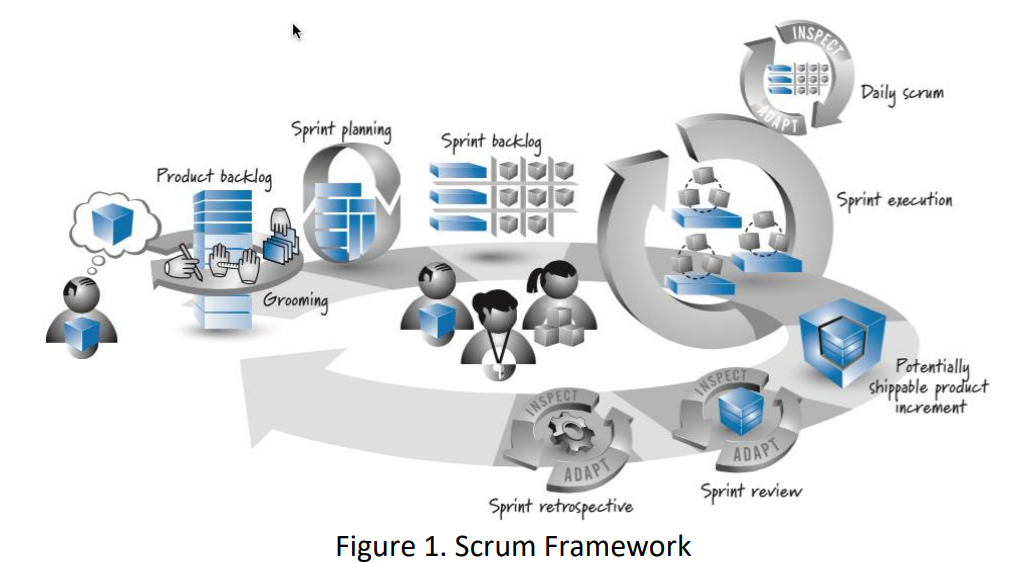
1. **ESSAY (50 points)**



Please see the Figure 1 (the scrum framework) and use your understanding about the figure above to answer the questions below!

1. **[LO 1 & LO 2, 10 points]** What should scrum master consider in planning the project of software development?

**Answer:**

1. **Understands Team Development**

**The fundamental of Scrum is Scrum Team**. Scrum Team is a collection of individuals **working together** to **deliver the required product increments**.

So, **Scrum Master** must **aware the different phases a team will go through** and **understand different stages of team development** such as forming, storming, norming, performing and adjourning.

**If Scrum Master consider above phases** in project planning, **can minimize the risk in or something unexpected also stable team composition can be built**.

1. **Understands Principles of Scrum More Important Than Practices**

**Without a solid, supported understanding** of the **Scrum principles**, **every implemented practice is basically useless**. It's an empty shell **because team involved in each project can be different and the company environment and legacy can be different too**.

So, **in-depth understanding of the scrum principles** by everyone involved **will increase the chances of successful usage of practices drastically**.

1. **Observes the Past Experience**

**Observes Scrum team with their daily activities** such as clear view to what is being discussed (and what isn't) and what everyone’s role is during the standup **so can apply lots of different retrospective format**.

**This ensures the development will be a fun and useful event for the team** depends on team's situation and supports the team. Also, **stressful level of the team can be drastically dropped by psychology**.

1. **Can Coach Professionally by Leads Example**

**A great Scrum Master** is someone that team members want to follow by **inspiring them to unleash their inner potential and showing them the desired behavior**.

**At difficult times, shows them how to act on it, doesn't panic, stays calm and helps the team find the solution** so all members joy to attend meeting with well prepared, useful and fun, and has a clear purpose.

1. **Forms a great duo with the Product Owner and Understand other Development Methodology**

**A great Scrum Master has an outstanding partnership with the Product Owner** so they can build the foundation for astonishing results by knows the strengths, weaknesses, opportunities, and risks.

**Also competent with XP, Kanban and Lean to understand what a team wants to achieve** and **helps them become more effective in an agile context**.

1. **[LO 2 & LO 3, 20 points]** What should scrum master do in sprint planning activity? Please explain it in detail!

**Answer:**

1. **Review Product Roadmap**

**There are always too many features that would add value**, therefore creating a lack of focus on the vision and goals. **By focusing on the features too much, the roadmap will turn into an overloaded product backlog**.

In short, **Force to think about the top most important features** for a release by **Keep it simple, Focus on goals and benefits, Have the courage to say no, to prevent an overload of features in roadmap** **so can Think twice about adding timelines, dates, or deadlines for the Sprint Planning**.

1. **Review Groom Product Backlog and Update User Stories**

**Product backlog is all of the bugs, issues, and user stories that Product Owner made** (informal, natural language descriptions of one or more desired features).

**So, It’s important to Review the groom/cleaning these stories with Product Owner** **Before Meeting** **so not wasting time going over small details or asking for clarification**.

**To do that, Create categories for issues**, which will allow Scrum Master **to quickly see the kind of work each task involves** or **sub-issues to break up larger user stories into the individual technical tasks** needed to complete and connect relevant tasks and stories together.

**Also provided enough space so that each issue in product backlog can include all relevant information** including a proper description, priority, status, estimated time, and even acceptance criteria.

1. **Propose a sprint goal and backlog before the sprint planning meeting**

**With a properly groomed product backlog it’s time to actually start Sprint goal**. **Sprint goal needs to be realistic based on the scope of work and the size of team**. **To figure out what “realistic” means, use what’s called “Velocity”.**

**Velocity is indication of the average amount of Product Backlog turned into an Increment** of product during a Sprint **tracked by the Development Team for use within the Scrum Team**.

**If a team is new and don’t have an average velocity** then **Scrum Master will tell the scrum team should come together to discuss what can be done so everyone has buy-in**.

1. **Use data and experience to supercharge Sprint planning meeting**

**The meeting starts by setting the stage and providing context**. **If already had a review and retrospective of last sprint, the scrum master can go over any action items or lingering issues**.

**Next, the product owner updates everyone on product and market changes before sharing the sprint goal**. This helps align everyone and gives context behind this current sprint.

**If Sprint had done before, use data from Velocity Chart to see the output of team during a sprint for helping estimate how much can get done**.

Also **Lead Time Chart, which shows the time between an issue being opened and closed** and **Burndown Chart shows how a project is progressing (and how adding new feature requests will impact plan)**.

Lastly, the **Cumulative Flow Chart shows how issues are flowing through different statuses and can help answer some key questions**, such as Are issues being completed, Is there any particular status that is holding things up, How long does it take to go from new project to value created and Is the scope of the project changing over time.

1. **Review each user story and describe what tasks need to be done**

**The more detailed planning can do as a team, the less likely going to hit roadblocks a week or two into the sprint**. So, It’s important to go through each task as a team and capture the key points, rationale, and concerns on the relevant issue.

**Relevant issues** in this context **such as What’s changed since this story was written**, **Is the estimated time still valid given recent work**, **Are there are dependencies we should be aware of**, **What about testing, Can automate it?**, **Do we have the skills to complete this task or specialists required and how can optimize their time so they don’t become a blocker?**, **What implications will this story have on the rest of the product such as there's other teams that need to be involved with this story or give sign-off on the design or code?**.

1. **Get Verbal Commitments from Everyone In The Room and Create Safe Environment**

**A goal without a plan is just a wish, so proper sprint planning does a lot of things well**. At the end of the sprint planning meeting the **development team should be able to explain to the product owner and scrum master** just how it’s going to work to hit the sprint goal **to get verbal commitments from everyone in the room, explaining what they’re doing, why, and the goal**.

If there is done minimal once of Sprint Retrospective, must **consider things like people won’t speak up in retrospectives unless they feel safe in doing so**. **That means getting everyone to agree that what happens or is said in a retrospective, stays in the retrospective**.

1. **[LO 2 & LO 3, 20 points]** What are the differences between sprint review and sprint retrospective? Please clearly explain them in detail and give several examples for doing so!

**Answer:**

1. **Sprint Review (Focus on the Product)**

* **Development Team will describe and demonstrate the results they have achieved during One Sprint while the stakeholders provide feedback**, Discuss about delay, causes of it, and solution in the future.
* **Also attended** by the product owner and manager, Scrum Master, management, and **anyone else who is involved in the product creation process**.
* **The Scrum Master** needs to **ensure the meeting doesn’t run longer than Four (4) hours per month-long sprint**.
* **Product Owner Inform the team about the unfinished tasks** and finally **all team members can discuss problems that occur at work**, and the **team must discuss what they will do in future**.

1. **Sprint Retrospective (Focus on the Process)**

* **Review of team performance during one sprint** such as what Done Well, what Went Wrong, and what would be improved.
* **Attended** by the Product Owner, Scrum Master, Development Team, and **anyone else who is involved in the Development Process**
* **The Scrum Master** needs to **ensure the meeting doesn’t run longer than Three (3) hours per month-long sprint**.

**Example Case (Question):**

A restaurant owner is planning to computerize their business. This restaurant provides dine-in, take-away and delivery services. The restaurant owner needs to have monthly reports on how the restaurant performs (sales reports).

The restaurant owner has asked you to develop the system. You (as the scrum master) brought your team to work on this application. Below are the results from the sprint planning activity: Note that the number inside the brackets shows the task number.

Table

Description automatically generated

The following shows the daily plan for the sprint:

Table

Description automatically generated

These are the conversation of the daily scrum meeting.

The development went according to schedule, with the exception of the following tasks:

* Day 2 Dewey has a slight delay in task 6. The delay was for 1 hour.
* Day 3 Minnie (task 4) an Louie task 3) have completed their tasks.
* Day 5 Donald encountered problem, a delay of 1 hour, therefore the estimated completion is 6 hours. Huey also has a delay of 1 hour in task 8.
* Day 9 Huey and Mickey encountered problems in task 14 and task 18 respectively. A delay of 4 hours for Huey and delay of 3 hours for Mickey.
* Day 10 everyone manages to catch up except for Huey. He still needs 14 hours to complete his work.
* Day 11 finally Huey caught up a little. At this point he needs 8 hours to complete task 14. Donald has completed task 17.
* Day 12 Huey needs 6 hours to complete task 14.
* Day 13 Huey needs 3 hours to complete task 14.
* Day 14 everyone has completed their tasks.

**Question:**

1. **[Sprint Review] You have noticed some delay occurs during the sprint execution. What are the POSSIBLE CAUSES of the delay, especially in the case of Huey, where the delay was quite large. How can you anticipate these problems in future?**
2. **[Sprint Retrospective] You need to identify insights in the following category: what worked well, what didn’t work well and what are the opportunity to do things differently. Identify 5 insights for each category.**

**Example Case (Answer):**

1. **Answer For the Sprint Review Question:**
2. **Expansion of Functionality**

* New functionalities continue to be conceived and requested as the project proceeds. The software can never be completed in this way.

**Anticipation:** Signed the Memorandum of Understanding (MoU) and Memorandum of Agreement (MoA) between Stakeholders, Project Manager, and the Team.

1. **Overly Optimistic Schedules**

* Pressure on the project team because of the (unrealistic) deadlines. These attempts lead to sloppy work and more errors, which cause further delays.

**Anticipation:** Complete a project (more) quickly sometimes arises for primarily strategic reasons. If it is not feasible, however, it should not be attempted.

1. **Customers Fail to Fulfil Agreements**

* When customers do not react in a timely manner to areas in which they must be involved, projects can come to a standstill.

**Anticipation:** Give warnings max. 3 times to customer. If Fail the Agreement again, charge more money for the project or no accept other project from that customer again.

1. **Tension between Customers and Developers**

* Because the project is not proceeding quickly enough as it disturbs the necessary base of trust and the working atmosphere.

**Anticipation:** Because User involve in the Sprint, user must know detailed so the misunderstanding can be reduced.

1. **Mediocre Personnel**

* Insufficiently qualified personnel can cause project delays as do knowledge and skills in working together to play the game of the project.

**Anticipation:** Signed the Memorandum of Understanding (MoU) and Memorandum of Agreement (MoA) between Stakeholders, Project Manager, and the Team.

1. **Answer For the Sprint Retrospective Question:**

* **Worked Well**
* **Minnie** has done a very good job in User Interface functions requirement. From 2 tasks, all of them done completely without any delay.
* **Donald** has done a very good job in User Interface functions requirement. From 3 tasks, only 1 times delay and only 1 hour of delay.
* **Daisy** has done a very good job in Testing functions requirement. From 3 tasks, all of them done completely without any delay.
* **Dewey** has done a very good job in Dine in Function and Prepare for Delivery Function, with only 1 hour of delay in Dine in.
* **Louie** has done a very good job in Password Validation and CRUD Menu, all tasks done with no delay.
* **Didn’t Work Well**
* **Huey** is not very good at doing his job in Process Payment functions requirement, because there is a lot of delay happened on that task.
* Not divided into several sprints, it is to Overly Optimistic Schedules.
* There’s Person who work on a task had less skills in that task.
* There is a contradiction on the Planned Sprint, where Testing done first before the other task completed. For example in task 9.
* The lack of people to do on this project is because the time each task is made is very small, causing a lot of delay.
* **Opportunity to do Things Differently**
* Task 8 (Delivery Service) and Task 15 (Prepare for Delivery can be built in one functions requirements.
* Task 6 (Dine in) and Task 7 (Take Away) can be done in one step of requirements, because it is same as buying food/drink.
* Make Sprint Planning more flexible by doing it in 2 or more Sprint.
* This Project can be done using with Swarming Techniques.
* Recruit more people if still want to do it in 2 weeks or the hours each task can be extended.

1. **CASE STUDY (50 points)**

In short, you (as a scrum master) got a project (with strict project charter) to develop a software application of hotel reservation (only for reservation business process). The hotel reservation application will enable customers to book the hotel room only by using smart phone or website. This application is likely similar to the hotel.com or traveloka.com (sub-application for reservation only).

You may refer to some reservation sub-applications/systems as your benchmark, such as hotel.com or traveloka.com application. Moreover, you are also allowed to use any assumptions to enrich your understanding and interpretation about this case (such as types of feature/back-log item, development team members, product owner, stakeholders, and so on).

The case questions are:

1. **[LO 2 & LO 3, 20 points]** Please take one feature (item) assumption from the product backlog and make one sprint backlog from it by breaking down the feature(item) into a more detail set of tasks!

**Answer:**

In the Study Case, **you are allowed to use any assumptions to enrich understanding and interpretation** as long as it is relevant to case.

**So, my assumptions:**

1. **For Product Backlog Item**
2. **This is Web Application**, **customer must Register and Login First** Before Using the Web Application.
3. **All purchase will be done outside of the web application**. So, **the payment must be using Third-Party like PayPal, Credit Card, or Debit Card, Also Bank Transfer**.
4. **The application will show the remaining time to complete the payment**.
5. **The customer can inquiry the invoice to track the progress**.
6. **After** the customer **complete the payment** and the **status invoice** in apps **will change from process become paid**.
7. The **system will Auto Email the Hotel that There is Success Order** as requested in invoice.
8. The **system will show the Unique Code Identification such as Code and Password or can just scan the QR Code** for customer use the on the Hotel that they order with print of the Invoice required.
9. **After** the **customer redeem the Code** then the customer will **change the status become “Has Been Used”**.
10. The **system will automatically change the status become “Has Been Used” if the Code for The receipt not used for certain days based on certain hotel regulation**.
11. The **system will automatically change the status become “Canceled” if customer didn’t pay the invoice or cancelled the reservation** ( this features depends on certain hotel regulations).
12. The **customer can give review for the certain hotel that they have been stayed and buy from application**.
13. The **customer can view the transaction history inquiry**.
14. The **Admin can inquiry all the transaction that have been done each months or certain period**.
15. The **Admin can inquiry the active customer each months or certain period**.
16. For **security purpose**, there are logically file to **encrypt the customer account password**.
17. **For Internal of Travel Application Team Members**
18. **IT Manager**

* Ensure all the entities involved have the proper privileges and shouldn’t be any information leakage due to inappropriate privileges.
* Ensure the network traffic on the system in manageable and system runs smooth with a good performance.
* Ensure the backup mechanism in case of database inconsistency or database failures can be done.

1. **Admin**

* Ensure can Login to the Application and Access the Application.
* Ensure Can used all menus in the Application.
* Ensure can manage point schedule and access lecture material data.

1. **Product Owner**

* Ensure Development team develop software based on Product Owner rules.
* Ensure Product Backlog is defined properly
* Ensure every progress of the task going based to the user stories.

1. **Customer**

* Ensure can Register and Login to the Application and Access the Application.
* Ensure can view the hotel with its detail accommodations.
* Ensure can view the image of the hotel room.
* Ensure can communicate to Hotel Management via Chatting Features.
* Can view the available schedule for each hotel.
* Can View the available Hotel by location.
* Ensure can Pay the invoice securely and safely through the application.

1. **For Product Owner**

**Product owner’s** role is to **define the user stories and create a process as to how we will be developing the software/system**. Also takes the lead in defining the core features that the system should have.

**Product Owner will be** **Chief Executive Office (CEO)** as he would be **aware about the software development process**. Responsible for communicating with stakeholders across the board, **to make sure the goals are clear, and the vision is aligned with business objectives**.

1. **For Stakeholders**

Stakeholders have legal decision-making rights and may **control project budgetary issues** include educating developers, financing projects, creating budgeting parameters, and setting milestone dates.

**Stakeholders will be** **Investors of the Application** as he would be **aware about the software budgeting process**. Responsible for **reviewing deliverable project items** include architectural diagrams, blueprints, and construction drawings.

1. **For Scrum Development Team Members**
2. **Scrum Master**

* Ensure Sprint Creation and Planning process went smoothly.
* Ensure remove barriers that have impact on productivity.
* Facilitate meetings between the product owner and the development team

1. **Stakeholder**

* Involved in the project or have interests that affected by the project’s outcome.
* Ensure all strategic business objectives meet the expectation.
* Ensure Project Progress in the right direction.

1. **Product Owner**

* Ensure Development team develop software based on Product Owner rules.
* Ensure Product Backlog is defined properly.
* Ensure every progress of the task going based to the user stories.

1. **UI & UX Manager**

* Ensure UI Designer worked based on the Sprint Planning and Product Backlog Grooming Priority.
* Ensure UX Designer worked in the right track based on Backlog Grooming Priority dan Sprint Planning.

1. **DevOps Manager**

* Evaluates technological choices (network/hardware related and technology/code related) by querying providers and providing evaluations of each solution include ROI evaluations in the present and future implications, limitations, and opportunities.
* Manages analysis and approval of new code through security and performance gates that will design and develop for feature-complete software. Be an advocate for security and performance standards in the organization.
* Manages operational aspect of production and development servers including developing, training in, and validating compliance with procedures and checklists related to disk space usage, monitoring solutions, deployment, conventions, access to the production and development sources, source control access and usage, performance monitoring, code modifications validation, scheduling, and more.

1. **Back End Developer**

* Developing ideas for new programs, products, or features by monitoring industry developments and trends.
* Compile and analyze data, processes, and codes to troubleshoot problems and identify areas for improvement.
* Collaborating with the front-end developers and other team members to establish objectives and design more functional, cohesive codes to enhance the user experience.

1. **Front End Developer**

* Determining the structure and design of web pages.
* Ensuring web design is optimized for smartphones.
* Building reusable code for future use.
* Optimizing web pages for maximum speed and scalability.
* Utilizing a variety of markup languages to write web pages.
* Maintaining brand consistency throughout the design.

1. **UI Designer**

* Develop standard UI components and style guides for company-wide use.
* Effectively communicate designs to developers and other key stakeholders.
* Address product, marketing, and business needs.
* Conduct industry research and stay up to date on best practices, competitor UI designs and emerging technologies.
* Provide support and internal training.
* Conduct, observe and analyses usability testing sessions.
* Develop consistent, intuitive architectures.

1. **UX Designer**

* Create prototypes and wireframes.
* Conduct usability testing.
* Create user stories, personas, and storyboards.
* Plan and conduct user research and competitor analysis.

1. **Software Tester**

* Interacting with clients to understand product requirements.
* Participating in design reviews and providing input on requirements, product design, and potential problems.
* Reviewing software requirements and preparing test scenarios.
* Executing tests on software usability.
* Analyzing test results on database impacts, errors or bugs, and usability.

1. **Defined Weighting Factor for each Backlog item**
2. **External Inputs**
3. Input Email
4. Input Password
5. Choose Hotel. Location, or Accommodations
6. Choose Hotel Type such as Star Level
7. Choose Payment Option
8. Login to bank Application
9. Choose Transfer
10. Fill virtual booking account Number
11. Customer change status to Finished
12. Customers give Review and Comment

**TOTAL: 10**

The complexity of the inputs is not very complex. Although there are a lot of inputs happening in the software, but the inputs are very simple. There are no files to upload or inputted. The inputs only contain of the strings and numbers. **Therefore, the complexity is Simple (3)**.

1. **External Outputs**
2. Display total price include tax fee
3. Display remaining time to complete payment
4. Display bank application on the website
5. Display invoice from process to paid
6. Display invoice from paid to has been used
7. Display “Canceled” if there is no payment in certain period of time.
8. Display “Has Been Used” after certain days no confirmation after payment based on each hotel legacy.

**TOTAL: 7**

The Output of the software is not very simple since there are a notification output and also calculated output such as the display. Therefore, **the complexity is Average (5)**

1. **External Inquiries**
2. Customer inquiry Invoice
3. System sends invoice inquiry to hotel management
4. Customer view transaction history inquiry
5. Admin inquiry active customer each month or certain period
6. Admin inquiry all the transaction that have been done each months or certain period

**TOTAL: 5**

The external inquiries are very average. All of the inquiries such as the invoice, history, orders, products, and show customer are very usual for website application. **Therefore the complexity is average (4)**.

1. **Internal Logical Files**
2. System validate username
3. System validate password
4. System check Number of Room left
5. System Calculate total price including tax fee
6. System Changing status from process to paid
7. System Changing status to “Has Been Used” (if there is no confirmation)

**TOTAL: 6**

The Internal Logical File of the application is not very complex unless the password that is encrypted. However, the rest are very usual such as the username, password, check items, transaction data, status and orders are not very complex. **Therefore, the complexity is average (10)**.

1. **External Interface Files**
2. Making Virtual banking account
3. Login to user banking account that provided in website application
4. Validating and transfer money to the virtual banking account
5. Tracking partners (Hotel Management and Bank Management)

**TOTAL: 4**

External Interface File will be complex as the banking system is not in our grasp and we used third party application and because it is a banking application there would be complex procedure in transaction process. The tracking is not very complex since it only needs API and usually the API is easy to use. **Therefore, the complexity is complex (10)**.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Information Domain Value | Count | Weighting Factor | | | Count X Weight |
| Simple | Average | Complex |
| External Input (EIs) | 11 | 3 | 4 | 6 | 33 |
| External Output (EOs) | 7 | 4 | 5 | 7 | 35 |
| External Inquiries (EIs) | 5 | 3 | 4 | 6 | 20 |
| Internal Logical File (ILFs) | 6 | 7 | 10 | 15 | 60 |
| External Interface File (EIFs) | 4 | 5 | 7 | 10 | 40 |
| Count Total | | | | | 188 |

1. **Run a Backlog Grooming**
2. **First Priority**

* Report generation at User, Payment and Staff level which includes such as performance, evaluation score, review score , Collaboration score, report score, and personal data.
* Get the report of all activities that happen on the Website such as Event Promotion, Special Day and so on.
* Creating a backup Database for the purpose of 100% availability of the system.

1. **Second Priority**

* Announcement to all User for the important message needed such as a maintenance on the website.
* See the report of all User for certain triwulan.
* See overall payment from the start of the year until end of the year.

1. **Third Priority**

* Add a new hotel management to the system and give him/her applicable privileges.
* Able to give the rights to hotel management to upload the detail accommodation of their hotel and image of hotel room.
* Each post can be seen by all user and admin. Each post will be grouped into star level, location, topic, and date.

1. **Defined Sprint Planning for Chosen One of the Backlog that have been groomed ( I Choose the First Priority Backlog)**

**First Sprint**

* Feasibility Check will be done for both the outstanding items.
* Any impediment will be resolved to start the actual development.
* 3 days 🡪 Making of User level reports.
* 3 days 🡪 Making of Event level reports.
* 3 days 🡪 Making of Staff level reports.
* 2 day 🡪 Doing an integration testing for all those reports.

**Second Sprint**

* 3 Days 🡪 Creation of new database as a backup of existing.
* 4 Days 🡪 Establishing connection primary and backup database.
* 5 Days 🡪 Test backup database by manually failing the primary.
* 3 Days 🡪 System to be able print and download all report.
* 2 Days 🡪 Report all payment for certain triwulan.
* 2 Days 🡪 Download invoice given by the system after payment.
* 3 Days 🡪 Able to see overall payment from the very first year.
* 4 Days 🡪 Testing all development.

1. **Mapping Sprint Planning into Activity Planning and Daily plan for the sprint**

* **Sprint 1 ( 14 days)**
* **Sprint Planning Activity**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Customer Level Report** | **UI (1)** | **Database Preparation (2)** | **CRUD Menu (3)** | **Testing (4)** |
|
| **Donald** | **Mickey** | **Louie** | **Daisy** |
| **10 hrs** | **15 hrs** | **15 hrs** | **10 hrs** |
| **Event Level Report** | **UI (5)** | **Database Preparation (6)** | **CRUD Menu (7)** | **Testing (8)** |
|  |
| **Minnie** | **Dewey** | **Mickey** | **Huey** |  |
| **15 hrs** | **15 hrs** | **15 hrs** | **10 hrs** |  |
| **Staff Member Level Report** | **UI (10)** | **Database Preparation (11)** | **CRUD Menu (12)** | **Testing (13)** |  |
|  |
| **Donald** | **Huey** | **Huey** | **Daisy** |  |
| **15 hrs** | **15 hrs** | **13 hrs** | **10 hrs** |  |

* **Sprint 2 (14 days)**
* **Sprint Planning Activity**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **List Hotel Preparation** | **UI (1)** | **Database Preparation (2)** | **CRUD Menu (3)** | **Testing (4)** |  |
|  |
| **Donald** | **Mickey** | **Louie** | **Daisy** |  |
| **10 hrs** | **15 hrs** | **15 hrs** | **10 hrs** |  |
| **Payment** | **UI (10)** | **Process Payment (11)** | **Prepare for delivery (12)** | **Testing (13)** |  |
|  |
| **Donald** | **Huey** | **Huey** | **Daisy** |  |
| **15 hrs** | **15 hrs** | **13 hrs** | **10 hrs** |  |

1. **[LO 2 & LO 3, 15 points]** Please make a list of people who you are going to invite in sprint review! And give a number of reasons why you think that you need to invite them!

**Answer:**

1. **Scrum Master**

The **Scrum Master** is there to **support the team also welcome the end-users** and **make sure they are included in the team, have the chance to be heard, and are behind the scenes**.

**Reasons why need to invite Scrum Master** because Scrum Master **facilitates the Sprint Review Meeting by establishes an environment among all members so that great accomplishments and goal achievements can happen**.

1. **Product Owner**

The **Product Owner** should **report the items in the Product Backlog**; **what backlog items have been done and what have not** and **leads the discussion on the Product Backlog as it currently stands**.

**Reasons why need to invite Product Owner** because It’s also a good time **to talk about the quality level of the product, the software’s release, and product burndown**. The Product Owner **can pinpoint what the reviewers should be looking for and explain to the team how to give their feedback**.

1. **Development Team**

The **Development Team** **discusses what went well and the problems they experienced** also **inform the group what they did to resolve the problems such as demonstrates their completed work while answering questions about their increment**.

**Reasons why need to invite Development Team** because **learning to accept feedback at each sprint session**, the team **gains more appreciation for the product owners and customers also feel less like they are being judged or graded by the product owner**. They will come away from the meeting **feeling more energized and motivated towards the next sprint**.

1. **Company Executives / Internal Stakeholders**

**Internal Stakeholder** is a person **external to the Scrum Team** with a **specific interest in and knowledge of a product** that is required for incremental discovery by actively engaged with the Scrum Team.

**Reasons why need to invite Internal Stakeholders** because **can receive a direct financial benefit** (helps the organization make more money or save money) **from using the software**.

1. **Other Internal Teams**

**Common approach to conducting the sprint review** is **Overview (Summarize), Demonstrate, Discuss, and Adapt**. Also, Sprint Review **to gain the Sprint Goal such as potentially shippable product increment that the team actually produced during the sprint** and End Product can be Served Well.

**Reasons why need to invite Other internal team** to **provide area-specific feedback or to sync their own groups work with the Scrum team** such as Sales, marketing, support, legal, compliance.

1. **External Stakeholders**

**External stakeholders** are those who **do not directly work with a company but are affected somehow by the actions and outcomes of the business** such as customers, users, vendors, regulators, partners, and banks participate in business activities.

**Reasons why need to invite External Stakeholders** because they **concerned with decisions a company makes and may meet with leadership or present information to the board of directors to review ideas, community concerns and other issues**.

1. **[LO 2 & LO 3, 15 points]** What should you do in sprint retrospective if several delay-problems of sprint execution occurred!

**Answer:**

1. **Sprint Retrospective Environment didn’t safe to speak up**

**Anticipation: Don’t Shy to Speaking Up**

Regardless of what we discover, we understand and truly believe that everyone did the best job they could, given what they knew at the time, their skills and abilities, the resources available, and the situation at hand

**Product Owner needs to create the right environment**. Focus on freedom to speak up and having everyone in a relative “comfort zone” such as try different dynamics game which are more suited to everyone in the session.

1. **Didn’t Get the All Problem Occurred in Sprint**

**Anticipation: Identify Insights**

Brainstorming is an excellent activity for **capturing insights that have not yet been acted upon**. The insight backlog is typically updated at the end of each sprint to reflect new insights.

Identify insights by **collaboratively examining, interpreting, and understanding both the objective and subjective** data which helps teams find the root cause of issues.

1. **Can’t Got the Main Problem of All Problem Occurred**

**Anticipation: Fill the Board with Sticky Notes and Start the Discussion**

The whole team should **write their suggestions and concerns for each category on sticky notes** and doesn't have to be a detailed description explaining the whole idea.

**Every time that someone writes an idea, post the sticky note onto the chart in its corresponding section**, as described above and this **should take five to ten minutes at the most, depending on how many people you have in team**.

1. **Needs a Long-Time over Tolerance to Decide what is team going to do**

**Anticipation: Vote on the Best Ideas**

**Focus on creating specific action items so that next sprint goal can be accomplished**. Therefore, each team member should vote on the three sticky notes that they think we must act upon.

1. **Didn’t Spread the Task after Vote the Best Idea**

**Anticipation: Determine Actions**

Once the team has identified their next idea, they need to move from discussing them **to taking demonstrable actions to leverage them and will need to prioritize the insights**.

**Determine how much capacity they will have for any improvement actions during the upcoming sprint** and **continuously the big picture/main goal/purpose by reminding purpose often**.

1. **Didn’t Optimal Spread The Task by didn’t Prioritized The Insight**

**Anticipation: Prioritized Insight with Real Action**

Once the team has spread its task and estimated its capacity, **define concrete, actionable steps to leverage the insights and improve the Scrum process better and cleaner**.

The steps can be **such as teams discover that it isn't possible to immediately address the insight and have to choose instead to explore the insight by tracked the insight backlog**.