Week 2

Add CIs to a Git Repository

Samuel Djonorh

CS406 Advanced Software Engineering

Prof Jack Lusby

i. SD\_CS406\_SAMS

1. Planning
   1. Project\_Management
      1. Project Initiation
         1. Items that are brought up are the initiation of the project of the SAMS website, determine the deadline of the project which is 1 month, how many teams/personnel will be involved in the project.
      2. Project Planning
         1. Teams have been established into 3 different groups of 2 team members. Design team, Tester, and Quality assurance. A schedule or timeline will be developed to identify how long each team has until they have to pass their portion of the task to the next team.
      3. Project Execution
         1. After the project has been created and the tests have been done to ensure that everything works as intended, it will be sent to the quality assurance team and to detail any errors that have been identified and bring it up to the rest of the team so that it can all be fixed and completed.
      4. Project Closure
         1. Once a team has completed its portion of the project, it will be moved to the next team. Once all three teams have completed their portion and the QA has deemed the tasks as a pass, then the project will be complete and will have a release date.
   2. Configuration\_Management
      1. Identified\_CIs\_document
         1. Revision Control Implementation
            1. Identifies which revision of the project is currently being worked. Once a new revision is completed and planned to be released, the revision date will be increased by 1. A history will be saved to allow for easy review of a previous revision and the changes that were in that revision.
         2. Configuration Identification Role
            1. Will be used to identify what will be configured, what the information will be contained and how it will be controlled.
         3. Change Control
            1. Keep a log of all documents and logs of the changes that are or have been made to communicate with the other members of the team. Having the communication piece for these issues is key to ensure that it doesn’t happen again or have a similar occurrence to prevent the project from being released later or have one team spend more time than needed.
         4. Change Management Item
            1. Identify a reason why it needs to be changed. There may be some issues that have been brought up from a user that may not allow the task to be performed.
            2. This will involve the testing of the website and won’t be released to the final stage of the project closure.
            3. This may cause a later release date if all the discovered items haven’t been corrected in a quick manor. This could cost more money as it will make the team members involved work longer hours and spend more money on resources.
         5. Product Release
            1. Will be released when all items have been checked and validated through the testers and Quality Assurance.
   3. Risk\_Management
      1. Identified\_Risks\_document
         1. Security Risk
            1. Ensure that there is an enabled secured measure to prevent hackers or any person not authorized to get any important information.
            2. Establish a two way login to ensure the credentials of the individual logging in is the actual person. This will encompass having an email and a security question that was generated in the profile setting.
         2. Time Out Feature
            1. If the member has inactivity usage of the website in a specific time frame(30 minutes), the site will automatically log the user off causing them to have to log in using their username/password.
2. Iteration\_1 (Design Team)
   1. Planning
      1. The team will decide in how they plan on designing the website. They will also determine if they can meet the deadline that is given for them. If they need more time, then they will let the project supervisor know so that they can let the other teams adjust their schedules accordingly.
   2. Requirement
      1. Determine the requirements of the system that will be used in the project. Determine what type of coding that will be used so that the other team members know what to look forward to. There would be no sense of creating a code for C# if the other teams are planning on using HTML or JAVA.
   3. Design
      1. The basic design of the website would probably be best and then once that portion has been built, they can elaborate a little bit more on the processes that seem a little bare.
   4. Implementation
      1. The items that will be discussed in this portion will be talked about how they are to be implemented and the function of each task. One task will be fed into another to ensure that the program is working as intended.
   5. Integration
      1. This will be brought up on how the program will be integrated. What type of system that will be used and ways to increase the product use will also be brought up. The easier the project it is used for a user is better, but there will be times later where it will be updated or enhanced which will possibly change the way that the project is ran.
   6. Validation
      1. Validating that the design works as intended and that there are limited errors. This phase will be routed up to the tester phase to ensure that everything that has been implemented in the design portion will be tested to ensure everything is working the way it should.
3. Iteration\_2 (Tester)
   1. Planning
      1. Testers will sit down and discuss the previous team’s goal and develop ways to start testing the design of the project. There will be bugs that will occasionally pop up and if the testers aren’t able to figure out why it isn’t working the way that it should, then they will need to reach out to the designers and see if there is an alternate way of completing the specific task.
   2. Requirement
      1. Test all required portions of the website to ensure that it is working as intended and have minimum errors.
   3. Design
      1. If the original design of the project is working well, then the tester’s can ask the designer’s to add in other details to increase the wellness of the website. This can involve adding in buttons on the site that wasn’t there before. Having links that will either bring you to another part of the website or one that can link to an outside source. Ensuring that there is a security measure that will prevent hackers from getting users personal information.
   4. Implementation
      1. Testing each update portion of the project to ensure it works correctly. Anything that isn’t working or creating errors will need to be changed. It may cost a little more money and time to get it corrected, so the deadline may need to be moved to the right. This will be discussed with both teams to allow ample time for the changes to be made, tested, and implemented.
   5. Integration
      1. Ensure that the tests for the project work well with any system or app that will be using it. There may be issues that will work on one system but not on the other. This causes mixed information or not updated information that should be reflected on all aspects of the project.
   6. Validation
      1. Validate and ensure that there are limited errors and it works accordingly before moving on to the quality assurance portion. There will be expected errors and other problems that may arise that the QA team will identify. These will be diagnosed as the problems have been identified.
4. Iteration\_3 (Quality Assurance)
   1. Planning
      1. Sitting with the members to establish the deadline of the role of the QA team. Talk about the issues that were had in the previous teams and ways to eliminate them.
   2. Requirements
      1. Team members will sit and go through the project and determine if the requirements need to be changed to better fit the scope of the user and possibly create a better or more stable version to limit the amount of problems that may be created.
   3. Design
      1. QA will go over the issues noted in the design and have them changed. They made make some suggestions to increase the ability of the project without it losing any of its purpose. For example, there may be a long list of code created that could result in the search function that will give erratic results. By manipulating the code and have less coding involved, it could remove the errors caused by extra information in the code.
   4. Implementation
      1. Using the project to test the way that the website it setup and how well it works. If there are things that can be changed to better implement the way that something is done in the site, then it will be discussed with the other team members and they will go in and make the necessary changes to implement into the project
   5. Integration
      1. Ensure that the project is implemented into the other applications that it may used so that the information will be synched with the other applications used on other devices.
   6. Validation
      1. Ensuring that it works the way that it was intended and has very minimal errors that will drive the production release date to a later time. Once this has been completed, then it will be brought up to the project manager and it will then be released to the public.

A screenshot of a cell phone

Description automatically generated