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**QUESTION 1**

a.) The name of the project will be called SURE SWIM TEAM

b.)

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| --- | --- | --- |
| Project Stakeholders | Roles | Titles |
| Project manager | A project manager is a professional in the field of project management. Project managers have the responsibility of the planning, procurement and execution of a project | Association of Parents |
| Project Sponsor | The project sponsor is one, and only one, level above the project manager. They do not manage the day to day operations of the project but they ensure the resources are in place, promote the project, and hold overall responsibility for the project's success. | The Head Coach |
| Project Team Members | The project team includes the project manager and the group of individuals who work together on a project to achieve its objectives.  | Association of Parents, The Head Coach, The Three Assistant Coaches, The Graphic Artist, The Web Developer and my very own self as The Co-Web Developer  |
| Customer | A customer is a person or company that receives, consumes or buys a product or service and can choose between different goods and suppliers. The main goal of all commercial enterprises is to attract customers or clients, and make them purchase what they have on sale. They also try to encourage them to keep coming back. | The Boys and Girls within the ages of 6 and 18. |

c.) The SWAN OUTLET swimming project basically, is a project set up for providing information to boys and girls between the ages of (6-18) who are interested in joining the swimming team. The purpose of this project is to create an attractive, informative,engaging website for coaches, the young swimmers, and association of parents.

The purpose of this project is to provide information about the swimming practices time and schedule and also, information about the swim meet schedule for the season’s competition and meet results.

The purpose of this project is to make work load easier in providing information for the children so at to avoid confusion. Each child within the given age bracket are divided into groups which will contain their practice time and also swim meet schedule for the season.

d.) My choice of project management methodology that can be applied to this project is the AGILE METHODOLOGY

**Reason:**

Agile is best suited for projects that are iterative and incremental. It’s a type of process where demands and solutions evolve through the collaborative effort of self-organizing and cross-functional teams and their customers.

e.) **Project Scope:**

1.) To design, develop and implement an interactive website using web 2.0 technologies to enable users to get timely information, add content and share with other members of the swimming team.

2.) To develop a website that is accessible to the public and also allows visitors to sign up and request additional information about the team.

3.) To develop a database of users to store profile information and login credentials for privileged site users.

4.) To develop a database to store, retrieve and display scheduling information for practices, scheduling information for swim meets and results of swim meets.

5.) To develop a content file management to effectively store, retrieve and display picture images.

6.) To provide administration capability to update the website with current information, relevant content and manager users.

7.) To develop a website that is search engine optimized to drive traffic to the website.

f.) **Key Requirements of the Project:**

1.) Home page: The website will provide a home page that is accessible to the public

2.) Swim meet page: The website will include a swim meet page that is accessible to the public

3.) Swim practice page: The website will provide a swim practice page that is accessible to the public

4.) Photo gallery: The website will include a photo gallery page that is accessible to the public.

The photo gallery will identify the names of swimmers and coaches in the photos.

5.) Coaching staff page: The website will provide a coaching staff page that is accessible to the public and provides a bio, photo and contact information for the coaching staff.

6.) User administrator: The website will provide a user administration capability that provides registered admins the ability to create, update and delete user ids.

7.) Content administration: The website will include a content administration capability that allows registered users to create, maintain and delete website content.

8.) System Requirents:

The website will be accessible over HTTP using modern web servers.

The website will be compatible with PC or Apple browsers.

The website will be hosted on a secure web server platform.

The system will provide sufficient security access controls to ensure any private information is stored securely on the hosted database servers.

The system will provide the capability to view and analyze website traffic and hits reports and metric.

g.) **Some of the risks that may be associated with this project:**

1.) The parental association may use their to expand the scope of the project and add their requirements.

2.) If specific technology requirements are provided by the project stakeholders, beyond what is defined in this document, portions of the project may need to be outsourced if they require technology outside the skillset of the web development tools with which the project team is familiar.

3.) The graphic must be approved by all stakeholders before development can begin.

4.) There is no guarantee that a website that meets all the criteria of the project will achieve the project measurable organizational value (MOV), without support from stakeholders. That is to say, the website needs to be promoted to intended user base.

5.) Presh Swim Team must keep information current and relevant to intended users, else site usage may not meet expectation.

6.) The swim team will be modifying when posting meet results. This could compromise the integrity of the system if users are properly trained.

f.) I will suggest the Work Break Down structure to be employed in undertaking this project

**QUESTION 2**

a.) The application software package I mostly use for programming is JAVA.

b.) I use Java most often especially for server-side language for most back-end development projects, including those involving big data and Android development.

c.) For me, my most used java function is toString(). From printing an entire array in one line (without loop) to checking if a number or string is a palindrome in one sentence. Everything is easier due to this one

while my least used java function is javax.print.\* - I don't even think I've used a program that uses this for printing.

d.) How I would rate the overall quality of the JAVA on a scale from one to five?

Reliability: It measures the probability that a system will run without failure over a specific period of operation. It relates to the number of defects and availability of the software.

Maintainability: Maintainability measures how easily software can be maintained. It relates to the size, consistency, structure, and complexity of the codebase. And ensuring maintainable source code relies on a number of factors, such as testability and understandability.

Testability: Testability measures how well the software supports testing efforts. It relies on how well you can control, observe, isolate, and automate testing, among other factors.

Portability: Portability measures how usable the same software is in different environments. It relates to platform independency.

Reusability: Reusability measures whether existing assets — such as code — can be used again. Assets are more easily reused if they have characteristics such as modularity or loose coupling.

Therefore, I would rate JAVA a 5 on the scale of one to five(very high quality)

e.) I gave JAVA the score 5 because it is a very high quality

Reasons:

.Does what it should

.Follows a consistent design style

.Remains easy to understand

.Requirements have been well documented

.Is highly testable via automation

.Is easier to comprehend and to follow along (eg, is highly maintainable)

f.) In my own opinion 3 most important attributes of a high quality software package used in programming

1.) They are easy to write

2.) They are easy to read and understand.

3.) They are easy to debug.

**QUESTION 3**

a.) **Five factors that should be considered when allocating staff to a task:**

1.) Priority: Consider the work’s priority. Priority needs to drive everything. If you’ve been rigorous in your prioritization process, start at the top of the list and begin allocating work from there. That list should be based on the team’s and the organization’s goals. This has to be the first consideration in terms of how you distribute work. If a project is a top priority and somebody is available to do that work, they should be tasked with that work.

2.) Skill Set: Evaluate the skill set of the people who I am thinking about distributing the work to. If they have the right skill set, I am going to get a high quality result. The end product will be something that meets my customer’s needs. This also reduces the likelihood of people failing because I am not giving them work that they don’t have the skill set to perform. I am giving them something they can be successful with.

3.) Availability: The next consideration for allocating work is a person’s availability. All things being equal in terms of priority and skill set, who is free to do the work? Who has the bandwidth? I would not be shifting resources from one project to another when I have available resources to pick up that new project.

If I start shifting resources around between projects when I have available resources elsewhere, I am going to lose momentum on that first project and that project might fail. Additionally, the people who are on the project are going to be very frustrated. They had the resources they needed and all of a sudden they don’t. It’s going to seem like it was at a whim to just move somebody around. The person who will be most frustrated is the person who has the resource taken off the project they’re succeeding on and put onto something new.

4.) Development: Next, I have to think about the development opportunity this project might present for that person. I should be constantly upgrading my team’s skill set. A way to do that is to give them new work where they’re going to learn new skills. Put them in situations where they’re going to be a little bit uncomfortable. Give them projects where they’re going to have to step up and learn, be taught, and be open to feedback and coaching. That’s how I am going to take my team to the next level of performance.

5.) Interest: The last consideration in terms of which person gets the work when it needs to be allocated is does somebody have an interest in performing that particular task? If someone is really interested and passionate about a project, I should let them take it on. They’re going to be motivated, excited to do it, and hopefully their performance will follow. One caveat here – make sure people don’t only gravitate to the work they enjoy doing and they stay away from things that they’re not comfortable with. If I let that happen, they’re going to end up getting pigeonholed and they’ll be very narrow in their focus.

b.) **Some possible actions to be taken:**

1.) Evaluate What's Required: First, you need to understand exactly what the task involves. If your deadline is for a complicated task or project, see our articles, Business Requirements Analysis and Work Breakdown Structures , to identify and map out what work needs to be done.

2.) Get the Right Resources: Next, make sure that you have what you need to get the job done promptly. Will you have the people, technical support, equipment, training, or materials ready and available in time? If not, you may have to suggest a longer schedule, or a lowering of the quality or quantity of work that you'll deliver on time.

3.) Allow for Problems: Things don't always go to plan, so it's wise to think about potential problems. For example, how would illness, equipment failure, or an unexpectedly urgent and important competing task affect your plans?

Consider what contingencies you could draw up to minimize the impact. You might, for example, consider briefing a co-worker so that he or she can cover for you or another member of your team in an emergency.

4.) Plan in Detail: The next step is to create a detailed schedule. A good approach is often to break tasks down into small components and to create deadlines for each one.

As a result, you might find that you're going to need more time than the overall deadline allows. Be sure to raise this as an issue as soon as possible, and avoid simply hoping for the best.

5.) Limit the Damage of a Missed Deadline: Despite all your hard work and forethought, you might still miss a deadline. If this happens, keep calm and make every effort to limit the damage.

Keep your stakeholders informed of progress throughout your work, highlighting any issues that delay you, and show that you are putting your contingency plans into action. Then, if you do fail to deliver on time, more people will understand the situation – and some might be prepared to help you. In such a situation, it's best to deal with the immediate problem quickly, and to agree and meet a new deadline. Then, hold a project review to identify what went wrong and to guard against a repeat.

c.) **Steps needed to go through from identifying the need for a new resource right through to the end of the recruitment process**:

1. Identify the hiring need

2. Devise A Recruitment Plan

3. Write a job description

4. Advertise the Position

5. Recruit the Position

6. Review Applications

7. Phone Interview/Initial Screening

8. Interviews

9. Applicant Assessment

10. Background Check

11. Decision

12. Reference Check

13. Job offer

14. Hiring

15. Onboarding

**QUESTION 4**

“The increased popularity of ‘lightweight’ project methods, for example AGILE, has led to some people questioning the need for well-established structured methods. There is no method that is always best, each is more appropriate in certain circumstances”

Do you agree with the above statement? Give reasons to support your answer.

**Answer**

I think that well-established structured methods should not be prioritized, as they involve risks and uncertainties if things don’t go to plan, and it can lead to project failure.

**Explanation**:

With agile project management, there is more flexibility with regards to incorporating changes and modifications at any stage, and this promotes better delivery of the project results.

Secondly, there is more control of the project, in that you can dictate the deliverables, and change strategies when they are not working, and this promotes more management of the outcomes, which is not so effective with structured methods.

Quality is improved with agile management, and the structured methods are too formal that controlling their quality and success may be difficult, and therefore, they should be less popularized.

**QUESTION 5**

a.) The term “Stakeholder” in relation to an IT development project, can be defined as either an individual, group or organization who is impacted by the outcome of a project. They have an interest in the success of the project, and can be within or outside the organization that is sponsoring the project.

b.)i) **Four different types of stakeholders in this project:**

1.) Project Sponsor: Individual that but they ensure the resources are in place, promote the project, and hold overall responsibility for the project's success.

2.) Project Team: Individuals who work together on a project to achieve its objectives.

3.) Customers: Individuals that receives, consumes or buys a product or service and can choose between different goods and suppliers regarding the project.

4.) Users: Individuals who enjoy the services of the project end-product.

b.)ii) **The concerns of Stakeholders in the project:**

-Communication

-Staffing(Turnover)

-Project cost

-Trust

-Project planning

-Conflicting priorities & urgency

-Politics

-Safety

-Documentation

-Project schedule

-Scope creep

-Satisfying the client / stakeholders

-Too many meetings

-Accuracy in reporting

-Change management and Chain of command

c.) People directly responsible to the project sponsor:

-Project Manager

-Project Team

-Customers/Users

-Vendors

-Business Partners

**QUESTION 6**

a.) **Project management infrastructure that would be needed to support a software development consulting team working at a client site:**

1.) Providing expertise on how to develop the overall structure,

2.) Providing guidance in the areas of organizational development that are required for a successful implementation.

3.) Ensuring there are effective connections throughout the organization so that the implementation grows effectively.

4.) Support in the structuring and development of assets as necessary, leveraging a massive depth of experience in doing so with a wide range of organizations.

b.) **How project teams should work in a massive IT through the concept of learning cycles:**



1.) Initiation Phase:

During the first of these phases, the initiation phase, the project objective or need is identified; this can be a business problem or opportunity. An appropriate response to the need is documented in a business case with recommended solution options. A feasibility study is conducted to investigate whether each option addresses the project objective and a final recommended solution is determined. Issues of feasibility (“can we do the project?”) and justification (“should we do the project?”) are addressed.

2.) Planning Phase:

The next phase, the planning phase, is where the project solution is further developed in as much detail as possible and the steps necessary to meet the project’s objective are planned. In this step, the team identifies all of the work to be done. The project’s tasks and resource requirements are identified, along with the strategy for producing them. This is also referred to as “scope management.” A project plan is created outlining the activities, tasks, dependencies, and timeframes. The project manager coordinates the preparation of a project budget by providing cost estimates for the labour, equipment, and materials costs. The budget is used to monitor and control cost expenditures during project implementation.

3.) Implementation (Execution) Phase:

During the third phase, the implementation phase, the project plan is put into motion and the work of the project is performed. It is important to maintain control and communicate as needed during implementation. Progress is continuously monitored and appropriate adjustments are made and recorded as variances from the original plan. In any project, a project manager spends most of the time in this step. During project implementation, people are carrying out the tasks, and progress information is being reported through regular team meetings. The project manager uses this information to maintain control over the direction of the project by comparing the progress reports with the project plan to measure the performance of the project activities and take corrective action as needed. The first course of action should always be to bring the project back on course (i.e., to return it to the original plan). If that cannot happen, the team should record variations from the original plan and record and publish modifications to the plan. Throughout this step, project sponsors and other key stakeholders should be kept informed of the project’s status according to the agreed-on frequency and format of communication. The plan should be updated and published on a regular basis.

4.) Closing Phase

 During the final closure, or completion phase, the emphasis is on releasing the final deliverables to the customer, handing over project documentation to the business, terminating supplier contracts, releasing project resources, and communicating the closure of the project to all stakeholders. The last remaining step is to conduct lessons-learned studies to examine what went well and what didn’t. Through this type of analysis, the wisdom of experience is transferred back to the project organization, which will help future project teams.

c.) **How Project Life Cycle (PLC) relates to Software Development Life Cycle (SDLC):**

The project life cycle (PLC) focuses on the phases, processes, tools, knowledge and skills of managing a project, while the system development life cycle (SDLC) focuses on creating and implementing the project’s product – the information system. How a project team chooses to implement the SDLC will directly affect how the project is planned in terms of phases, tasks, estimates and resources assigned. The SDLC is really part of the PLC because many of the activities for developing the information system occur during the execution phase. The last two stages of the PLC, closing and evaluating the project, occur after the implementation of the information system. The integration of project management and system development activities is one important component that distinguishes IT projects from other types of projects.

