Đề 2 – Iterative incremental – Chữa đề buổi 1

**Request 1**

Project manager: Internal stakeholder, planning and organizing, managing tasks, budgeting, controlling costs, scope and other factors. Everything they do helps make sure the project can be completed on time and on budget, and more importantly, profitable.

BA: bridges the gap between external stakeholders and the development team, interpreting business requirements into understandable development tasks to match a final software product with the expected business value

Developer team : internal stakeholder , He writes, debugs and executes the source code of a software application.

Tester team : Internal stakeholder. The role of a tester is to test out products for bug and provide reports to the project teams about any issues or improvements that the product may require

Customer;.. external stakeholder plays a vital role in providing requirements, feedback, and validation during the product development or service delivery process. Their satisfaction and adoption of the product/service are crucial for business success and growth.

Vendor - external stakeholder : Those vendor whom collaborate with our team to develop the system

**Request 3**

Request 3 WBS

***Job board System***

**Phase 1: Initiating (level 1)**

1.1.1 Create Project Proposal (level 2)

1.1.2 Create Project Charter (level 2 )

1.1.2.1 Solidifying the project scope (level 3)

1.1.2.2 Determine resources needed (level 3)

1.1.2.3 Define project SMART goal and deliverables (level 3)

1.1.3 Get project charter approval (level 2)

1.1.4 Hold a kick-off meeting (level 2)

1.1.5 Perform a cost-benefit analysis for the project (level 2)

1.1.6 Create stakeholder Register (level 2)

**1.2 Phase 2: Planning (level 1)**

1.2.1 Create Project management plan (level 2)

1.2.1.1 Scope Management Plan (level 3)

1.2.1.2 Time Management Plan (level 3)

1.2.1.3 Cost Management Plan (level 3)

1.2.1.4 Risk Management Plan (level 3)

1.2.1.5 Resource Management Plan (level 3)

1.2.1.6 Communication Management Plan (level 3)

1.2.1.7 Stakeholder management Plan (level 3)

1.2.1.8 Procurement Management Plan (level 3)

1.2.1.9 Quality Management Plan (level 3)

1.2.2 Meeting with team to discuss plans (level 2)

1.2.3 Deliver Project Management Plan (level 2)

**1.3 Phase 3 Executing (level 1) (Analysis, Design, Code, Test)**

**1.3.1 Requirement Analyse (level 2)**

1.3.1.2 BRS – Business requirement specification (level 3)

1.3.1.3 SRS –System requirement specification for module 1:Job management(level 3)

~~1.3.1.4 Perform Requirement validation (level 5)~~

~~1.3.1.5 Perform Requirement management (level 5)~~

**1.3.2 Iteration 1 – (Level 2)**

1.3.2.1 Design (level 3)

1.3.2.1.1 Basic design for module 1 Job management feature (level 4)

1.3.2.1.2 Detail design for module 1 Job management feature (level 4)

1.3.2.2 Implementing (level 3)

1.3.2.2.1 Code package for module 1: Job management feature (level 4) (usecase 1 to 10)

1.3.2.2.2 Unit test case (level 4)

1.3.2.2.3 Unit test report (level 4)

1.3.2.3 Testing (level 3)

1.3.2.3.1 Test Plan (IT,ST,UAT) module 1

1.3.2.3.2 Test case (IT,ST,UAT) module 1 (level 4)

1.3.2.3.2 Test report (IT,ST,UAT) for module 1 (level 4)

**1.3.3 Iteration 2 – (level 2)**

1.3.3.1 Design (level 3)

1.3.3.1.1 Basic design for module 2, 3 (level 4)

1.3.3.1.2 Detail design for module 2 , 3 (level 4)

1.3.3.2 Implementing (level 3)

1.3.3.2.1 module 1`s updated Codepackage (level 4)

1.3.3.2.2 Codepackage for module 2: Candidate management feature (level 4)

1.3.3.2.3 Code package for module 3: Recruitment management feature (level4)

　　　 1.3.3.2.4 Unit test case for module 2,3(level 4)

1.3.3.2.5 Unit test report for module 2,3(level 4)

1.3.3.3 Testing (level 3)

1.3.3.3.1 Test Plan (IT,ST,UAT) module 2.,3

1.3.3.3.2 Test case (IT,ST,UAT) module 2,3 (level 4)

1.3.3.3.2 Test report (IT,ST,UAT) for module 2,3 (level 4)

**1.3.4 Iteration 3 – level 2**

1.3.4.1 Design (level 3)

1.3.4.1.1 Basic design for module 4 (level 4)

1.3.4.1.2 Detail design for module 4 (level 4)

1.3.4.2 Implementing (level 3)

1.3.4.2.1 module 1`s updated Codepackage (level 4)

1.3.4.2.2 code package for module 4: Admin feature (level 4)

1.3.4.2.3 Unit test case for module 4(level 4)

1.3.4.2.4 Unit test report for module 4(level 4)

1.3.4.3 Testing (level 4)

1.3.4.3.1 Test Plan (IT,ST,UAT) module 4

1.3.4.3.2 Test case (IT,ST,UAT) module 4 (level 4)

1.3.4.3.3Test report (IT,ST,UAT) for module 4 (level 4)

**1.3.5 Deployment (level 2)**

1.3.4.1 Buy server, test device (level 3)

1.3.4.2 Setting server (level 3)

1.3.4.3 Deploy code release 1 in staging environment(level 3)

1.3.4.4 Testing in staging environment (level 3)

1.3.4.4 Deploy code in product environment(level 3)

1.3.4.5 Testing in product environment (level 3)

**1.4 Phase 4: Monitoring and Controlling (level 1)**

1.4.1 Control scope (level 2)

1.4.2 Track progress (level 2)

1.4.3 Perform Cost control (level 2)

1.4.4 Monitor and control Risk (level 2)

**1.5 Phase 5: Closing (level 1)**

1.5.1 Lesson learn (level 2)

1.5.2 Project Final Report (level 2)

1.5.3 Project Archive (level 2)

**WBS TRÊN NHƯNG THEO WATERFALL:**

***Job board System***

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**1.3.1 Requirement Analyse (level 2)**

1.3.1.2 BRS – Business requirement specification (level 3)

1.3.1.3 SRS –System requirement specification for module 1:Job management(level 3)

~~1.3.1.4 Perform Requirement validation (level 5)~~

~~1.3.1.5 Perform Requirement management (level 5)~~

**1.3.2 Design (level 2)**

1.3.2.1 Basic design for Job board system (level 3)

1.3.2.2Detail design for Job board system (level 3)

**1.3.3 Implementing (level 2)**

1.3.3.1 Code package for module 1,2,3,4 (level 3):

1.3.3.1.1 Job management feature (level 4)

1.3.3.1.2 Candidate management feature (level 4)

1.3.3.1.3 Recruitment management feature (level4)

1.3.3.1.4 Admin feature (level 4)

1.3.2.2.2 Unit test case (level 3)

1.3.2.2.3 Unit test report (level 3)

1.3.2.3 Testing (level 3)

1.3.2.3.1 Test Plan (IT,ST,UAT) module 1,2,3,4

1.3.2.3.2 Test case (IT,ST,UAT) module 1.2,3,4 (level 4)

1.3.2.3.2 Test report (IT,ST,UAT) for module 1,2,3,4 (level 4)

**1.3.4 Deployment (level 2)**

1.3.4.1 Buy server, test device (level 3)

1.3.4.2 Setting server (level 3)

1.3.4.3 Deploy code release 1 in staging environment(level 3)

1.3.4.4 Testing in staging environment (level 3)

1.3.4.4 Deploy code in product environment(level 3)

1.3.4.5 Testing in product environment (level 3)

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**Request 4 (đây là cách trình bày trên eos, nếu thi trên pea thì bài này kẻ bảng)**

Risk 1: The team lack the required skills for website testing

Possibility: High

Impact: Moderate

Mitigation plan: Plan training course to skill up your member

Contingency plan: Use the buffer cost to hire a senior tester into the Project

Risk 2 :Wrong budget estimate and cost overruns

Possibility: Moderate

Impact: Extreme

Mitigation plan: Establish the scope before beginning work, pay a lot of attention to project planning and constantly track and measure the progress by EVM

Contingency plan: cut down on the project scope

Risk 3 : The project schedule is too tight; it’s hard to complete this project on time.

Possibility: High

Impact: High

Mitigation plan: Set The priority for each of the activity

Contingency : negotiate with customer to reschedule

Risk 4 : Project manager has poor management skill

Possibility: Moderate

Impact: Moderate

Mitigation plan: Plan leadership training for manager

Contingency plan: Kick out that PM and choose another one

Risk 5 : A lack of cooperation negatively affects your member productivity

Possibility: Moderate

Impact: Moderate

Contingency plan:Encourage each team member in his task, and inspire them to greater efforts

Request 2

SMART Goals for Developing a Job Board System (JBS)

1. Smart goal : Increase User Engagement by 30% within 8 weeks of launch

- Specific: Focus on improving user engagement metrics such as time spent on the platform, number of job applications submitted, and frequency of recruiter logins.

- Measurable: Track user engagement metrics through analytics tools integrated into the JBS platform.

- Achievable: Implement features such as personalized job recommendations, user-friendly interface enhancements, and notifications to keep users actively engaged.

- Relevant: increasing in user engagement will ultimately fulfill the system's purpose.

- Time-bound: within 8 weeks of the system's launch.

2. Smart goal: Ensure 95% System Uptime within 12 weeks of Deployment

- Specific: Aim to minimize system downtime, ensuring the JBS remains accessible and operational for users.

- Measurable: Track system uptime using monitoring tools that provide real-time data on availability.

- Achievable: Implement robust server infrastructure, automated backups, and proactive maintenance procedures to mitigate downtime risks.

- Relevant: Reliable system uptime is crucial for providing uninterrupted service to users, maintaining their trust, and maximizing productivity for recruiters and candidates.

- Time-bound: Achieve the target of 95% system uptime within 12 weeks of deployment, allowing for continuous improvement and optimization.

3. Smart goal: Reduce Candidate Application Processing Time by 20% within 10 weeks of Launch

- Specific: Target the optimization of the candidate application process to reduce the time taken from submission to acknowledgment or feedback.

- Measurable: Track the average processing time for candidate applications before and after implementing improvements.

- Achievable: Streamline the application workflow, automate repetitive tasks, and introduce notification systems to keep candidates informed about their application status.

- Relevant: Faster application processing enhances the candidate experience, encourages more applications, and improves overall efficiency for recruiters and managers.

- Time-bound: Aim to achieve a 20% reduction in candidate application processing time within 10 weeks of the JBS launch, allowing for rapid feedback cycles and iterative improvements.

4. SMART GOAL: Increase Job Post Approval Efficiency by 25% within 6 weeks of Deployment

- Specific: Focus on improving the efficiency of the job post approval process managed by recruitment managers.

- Measurable: Monitor the time taken to approve job posts and track any bottlenecks or delays in the approval workflow.

- Achievable: Implement automated checks for job post compliance, provide intuitive tools for managers to review and approve posts quickly, and optimize the approval workflow for smoother operations.

- Relevant: Faster job post approvals accelerate the recruitment process, ensuring timely access to job listings for candidates and improving overall recruitment effectiveness.

- Time-bound: Target a 25% increase in job post approval efficiency within 6 weeks of deploying the JBS, allowing for faster turnaround times and enhanced recruiter satisfaction.

5. Smart goal: Enhance Data Security Measures to Achieve GDPR Compliance within 15 weeks of Development

- Specific: Focus on implementing robust data security measures to ensure compliance with GDPR regulations.

- Measurable: Conduct regular audits and assessments to evaluate the effectiveness of implemented security measures and track progress towards GDPR compliance.

- Achievable: Implement encryption protocols, access controls, data anonymization techniques, and regular security updates to safeguard user data and protect privacy.

- Relevant: GDPR compliance is essential for maintaining user trust, avoiding legal liabilities, and upholding ethical standards regarding data protection and privacy.

- Time-bound: Ensure full GDPR compliance within 15 weeks of JBS development, allowing for thorough testing, validation, and documentation of security measures.

Request 5

Path 1: Start-> A-> B-> C-> G -> End.Duration Path 1 = 0+4+ 3 +2+6 +0 = 15 weeks

Path 2: Start -> D -> B -> C -> G -> End. Duration path 2 = 0+5+3+2+6+0 = 16 weeks

Path 3: Start -> D -> E -> F -> G -> End. Duration path 3 = 0+5+4+2+6+0 = 17 weeks

Path 4: Start -> D -> H -> I -> End Duration path 4= 0+5+5+9+0 = 19 weeks => path 4 is critical path. 19 weeks are the minimum duration to complete the project

Explain: To reduce the overall project schedule by 3 weeks, we will focus on reducing the amount in the critical path. But after being reduced to 16 weeks , there is 1 more path that is exceeding this number which is path 3 – 17 weeks. On the other hand, path 3 and critical path (path4) both have task D . Obviously , we will have something to do with task D under crashing method

Crashing: In this method , we can try to shorten the duration of some of the critical path activities by adding additional resources or working overtime.

Solution1 : we can add more workers to task D to complete it earlier than 3 weeks

Solution 2: we can force the team to work overtime in task D so that it can be completed earlier than 3 weeks.

Solution 3 : reward the team if they can complete task D earlier than 3 weeks

Crashing will increase cost .