**Terna Engineering College**

**Computer Engineering Department**

Program: Sem VIII

**Course: Human Machine Interaction(HMI)**

**Faculty:** Mr. Umesh B Mantale

**LAB Manual**

**PART A**

(PART A : TO BE REFFERED BY STUDENTS)

**Experiment No.09**

|  |  |
| --- | --- |
| **A.1** | **Aim:** |
|  | Prepare the Interview Questions for Subject Matter Expert (SME) of your selected domain to gather requirements. |
|  |  |
| **A.2** | **Prerequisite:**   1. Knowledge of Interview techniques 2. Knowledge of Tools of Information Gathering and purpose. |
|  |  |
| **A.3** | **Outcome:** |
|  | **After successful completion of this experiment students will be able to**   1. Ability to Use this tool for gathering views and requirements of SMEs, and ultimately this will help them to know the System and business requirements. 2. At the end of this they will be in a position to design the relevant questions. 3. It will expose them for preparation of an Interview and its Questions. |
|  |  |
| **A.4** | **Theory:** |
|  | * **What is a SME person**?   A subject-matter expert (**SME**) or domain expert is a **person** who is an authority in a particular area or topic. The term domain expert is frequently used in expert systems software development, and there the term always refers to the domain other than the software domain.   * **What is the role of the SME**?   **Role**: Subject Matter Expert. The Subject Matter Expert (**SME**) is responsible for defining the business processes, the business policies and the application requirements. He leads the business rules acquisition activities as a domain expert and uses the Rules Management Application as reviewer  **The SME has the following responsibilities:**   * Support the definition of business processes * Determine and support the implementation of a business policy, generally by providing the following:   + the contents for the business rules that enforce the policy;   + the process contexts in which the rules are applied. * Oversee the execution of that policy via business rules applied. Such oversight includes confirming that the implemented rules fully and faithfully correspond to the intended policy. * Once Rule Writers have created the first set of rules, the SME reviews the rules, and the rule flow to give feedbacks on the logic and pattern used. * Review the results of testing and simulation * Manage business vocabulary * Resolve business issues relating to business rule execution. * Be accountable for the quality of the business rule * Approve major changes to business rule   In term of skill and competencies, the Subject matter Expert has a strong business knowledge and experience, some management skill, effective communication, leadership, decision making skills.  **What is an SME interview?**  When trying to uncover the functionality of an existing system or discover what a new or updated system needs to do to meet the business need, the most critical activity you will perform is **interviewing** stakeholders. **Interviewing** subject matter experts (**SMEs**) is part art, part science  **Some general practices:**   * Always interview the business subject matter experts first, your priority is to understand how the system is used and the [business process](http://www.bridging-the-gap.com/how-to-analyze-a-business-process/) it supports, not how the system works. * Establish [trust](http://www.bridging-the-gap.com/building-trust/).  SME interviews can seem a lot like that scene from Office Space where high-end consultants were brought in to figure out who to fire. * Explain why you are doing what you are doing and why you need their help.  Taking time to explain how the information will help you can go a long way in creating an open environment. * Establish credibility.  Come in with a [defined agenda](http://www.bridging-the-gap.com/how-to-create-quick-and-effective-meeting-agendas/) and set of questions wherever possible.  Be ready to show you’ve done your homework and aren’t asking them questions you could answer for yourself.  Always let them know what your next step is so they know this conversation won’t fade into the ether. * Get your SME to talk.  Ask them to show you how to use the system or explain a business process.  Ask open-ended questions to encourage dialog. * Let them talk.  If you get a SME talking, don’t stop them. [Listen carefully](http://www.bridging-the-gap.com/are-you-really-listening/) and encourage them to continue.  Ask follow-up questions.   What Requirements Questions Should I Ask?  When creating a requirements questionnaire, Here’s some generic questions you can use to spur your thinking.  How requirements questions   * How will you use this feature? * Is this feature a process and, if so, what are the steps? Or, what questions can I ask to ascertain the steps? * How might we meet this business need? * How might we think about this feature a bit differently? * How will we know this is complete?   Where requirements questions   * Where does the process start? * Where would the user access this feature? * Where would the user be located physically when using this feature? * Where would the results be visible?   When requirements questions   * When will this feature be used? * When do you need to know about…? * When will the feature fail? * When will we be ready to start?   Who requirements questions   * Who will use this feature? * Who will deliver the inputs for the feature? * Who will receive the outputs of the feature? * Who will learn about the results of someone using this feature? * Who can I ask to learn more about this?   What requirements questions   * What do I know about this feature? * Or, what assumptions am I making about this feature that I need to confirm? * What does this feature need to do? * What is the end result of doing this? * What are the pieces of this feature? * What needs to happen next? * What must happen before? * What if….? Think of all the alternative scenarios and ask questions about what should happen if those scenarios are true. * What needs to be tracked?   Why requirements questions  Why questions are great wrap-up questions as they help confirm that the requirements you just elicited map back to a need you identified when you scoped the project.   * Is there any other way to accomplish this? * Does this feature meet the business need and solve the problem we’re trying to solve? |
| **A.5** | **Procedure:**   1. **Establish a purpose for the interview with an achievable goal.** 2. **Identify what you already know in advance.** 3. **Prepare a list of questions in advance.** 4. **Plan your interview.**  * **Who is the best person to interview?** * **How much of their time will you need?** * **Can you call them directly to set up the appointment?** * **Do you need approval and an introduction?**  1. **Conduct your interview and take notes.**   Always introduce yourself and state the purpose of your interview with the content expert.  *“Hi, I’m Tim Buteyn. I’ve been asked to interview you about rental fleet management.”*  Then solicit help from your subject matter expert and explain why he or she was selected for the interview.  *“I understand you are the expert in this area, and I need your help to write a script for a training video on this subject.”*  When interviewing subject matter experts, it is always important to get them engaged in the interview process. Hand them your pen and say, “Draw me a picture of what you are talking about.” Or ask them, “Can you show me that screen?” It is also critical for you to circle back and repeat what you have been told.  Some of the most powerful interview techniques are phrases like:   * **Tell me** * **Show me** * **Draw it for me** * **Give me an example** * **So, let me make sure I understand**   You also have to know when to stop your interview and to recognize the difference in being stuck and knowing it is time to stop. Structured interviews should always move you forward. If you are not moving forward, you are stuck. If you are stuck, seek another perspective by re-framing your question. Or move onto another Level 1 question. You know it is time to stop when:   * **You have met your goals** * **You have enough information to know the risks and missing information** * **You have enough information to begin using it** * **You have absorbed as much as you can in one sitting** * **You have identified other content experts that need to be interviewed** * **Your time is up**   Wrap up your interview by thanking your content expert for their time and telling them what the next steps of the project are. Explain that you need to review your notes and you may have follow-up questions. Then ask what might be a good time to call or if they would prefer email.   1. **Follow-up as needed.** |
|  |  |

**PART B**

(PART B: TO BE COMPLETED BY STUDENTS)

***(Students must submit the soft copy as per following segments within two hours of the practical. The soft copy must be uploaded on the ERP or emailed to the concerned lab in charge faculties at the end of the practical in case the there is no ERP access available)***

|  |  |
| --- | --- |
| Roll No.: 61 | Name: Sangita Toppo |
| Class: BE-A | Batch: A3 |
| Date of Experiment: | Date of Submission: |
| Grade: |  |

|  |  |
| --- | --- |
| **B.1** | **Questions to be asked to the SME:** Which online news channels do you recommend for our application and why? This answers two questions at once. Has the candidate done the research on your company ahead of time, and how well versed they are in various social platforms? Pay attention if they mention demographics, style or frequency of messaging, and overall strategy. What goals should we set for our online news channels, and what does success look like? If their answer is to get as many likes and shares as possible, it may be time to politely end the interview. The path from likes to conversions is more like A to K than A to B, so they should be able to explain what that path looks like for different platforms. For most companies, conversions are always the goal.  The candidate should also be able to help you define success on a strategic and tactical level in order to support your larger marketing and business goals. How would you allocate our news channel budget? Specific metrics and KPIs should be discussed and what should go where percentage-wise. For example, a decent percentage can be allocated to Facebook Ads - a medium-sized company can spend as much as $500 per month on paid advertising. Human capital, social media tools, and training are also absolutely necessary for high ROI (Return on Investment). How long does the average person spend on online news channels per day? In 2019, the average news channels user spent around 1 hour and 15 minutes per day on online news channels. [eMarketer predicts](https://www.emarketer.com/content/us-adults-are-spending-more-time-on-social-media-during-the-pandemic) that this average will increase by 8.8% in 2020 due to social distancing and people spending more time indoors during the pandemic. So we can expect that online news channels users will spend around 1 hour and 22 minutes on average using news channels every day.   1. **What can you tell us about competitive differentiation in our domain?**   No matter what your business offers, there are other companies who provide the same products or services. When you’re asked this question, point out what sets your business apart. Great customer service? A guarantee policy your competitors don’t offer? Whatever they are, highlight those differences and explain why they’re important for your customers.   1. **How to deal with negative customer feedback**?   Instead of rehashing the negative feedback you’ve received, go into detail about what you’re doing to improve customer service. Whatever you do, don’t bash your customers or try to argue with the feedback that’s been given. Even if the feedback is inaccurate, becoming defensive will always make you look bad. How do you determine the functionalities that technical solutions should offer? Demonstrates knowledge, as well as how comprehensive and inclusive the candidate's approach is. What strategy have you found works the best to guide software developers? Tests the candidate's experience and reveals how effective their communication with software developers is. Can you describe your steps to ensure end-user proficiency with new software? Evaluates the candidate's experience in training, and reveals whether the steps described meet expectations.  How do you stay up to date with the latest trends in the industry? Assesses the candidate's ability to stay informed about the industry that they contribute their expertise to. |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
| **B.2** | **Conclusion:**  **We have researched on questions that should be asked to subject matter expert of our domain (online news channels) and we subsequently learned how to gather requirements from consultation and discussion with SME.** |

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*End\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***