# 作业1

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**In your opinion, which are top 5 good practices in developing software**

**requirement. Why?**

1. 充分沟通：

只有双方充分沟通才能确保所有相关方对需求有共同的理解，这对于准确捕捉反映用户需求和期望的需求至关重要。比如说在开发一个电子商务平台时，通过与销售部门、市场部门以及最终用户的定期沟通，使团队能够直接将反馈整合到设计过程中。例如，用户调研指出需要更直观的购物车界面，促使设计团队调整设计以提升用户满意度。

1. 需求可追溯性：

要时刻保证需求之间的逻辑连接和可追溯性，这样有助于团队理解每个需求的起源和必要性，同时便于将来的变更管理。在软件开发项目中建立需求追溯矩阵，确保每个需求都能追溯到具体的业务目标。例如，如果需求旨在提高系统处理速度，则可以直接关联到提高客户满意度和竞争力的更广泛业务目标。

1. 持续验证与测试：

开发者在开发过程中定期验证和测试需求，确保最终产品符合规定的需求，减少后期修改的时间和成本。在开发新的在线支付功能时，团队创建了一个工作原型，并进行了内部员工测试，以收集反馈。这一过程允许根据真实用户体验进行调整，确保功能符合用户期望并保持高质量。

1. 灵活性与适应性：

在需求管理中保持灵活性和适应性，对于随着市场条件和技术的变化保持项目的相关性和竞争力至关重要。在一个长期项目中，初始的技术栈可能变得过时。通过关注新兴技术并在必要时调整技术栈，如从传统服务器架构转向云服务，项目可以保持其技术优势并减少运营成本。

1. 详实的文档：

全面的文档便于所有团队成员理解和执行，并支持持续的维护和未来的开发。在开发客户关系管理系统的项目开始时，团队详细记录了需求收集的每一步，包括会议记录和变更记录等。这不仅帮助新团队成员快速上手，也为未来的升级和维护提供了重要参考。

1. \*\*Effective Communication\*\*:

Only through effective communication can both parties ensure a common understanding of the requirements, which is crucial for accurately capturing requirements that reflect user needs and expectations. For example, in developing an e-commerce platform, regular communication with the sales department, marketing department, and end-users allows the team to integrate feedback directly into the design process. For instance, user surveys indicated the need for a more intuitive shopping cart interface, prompting the design team to adjust the design to enhance user satisfaction.

2. \*\*Requirements Traceability\*\*:

It is essential to maintain logical connections and traceability between requirements, which helps the team understand the origin and necessity of each requirement and facilitates future change management. Establishing a requirements traceability matrix in software development projects ensures that each requirement can be traced back to specific business objectives. For example, if a requirement aims to improve system processing speed, it can be directly linked to broader business goals such as improving customer satisfaction and competitiveness.

3. \*\*Continuous Validation and Testing\*\*:

Developers regularly validate and test requirements during the development process to ensure that the final product meets the specified requirements, reducing the time and cost of later modifications. For example, when developing a new online payment feature, the team created a working prototype and conducted internal employee testing to collect feedback. This process allows for adjustments based on real user experiences, ensuring that the functionality meets user expectations and maintains high quality.

4. \*\*Flexibility and Adaptability\*\*:

Maintaining flexibility and adaptability in requirement management is crucial for maintaining project relevance and competitiveness amid changing market conditions and technologies. In a long-term project, the initial technology stack may become outdated. By staying updated with emerging technologies and adjusting the tech stack when necessary, such as transitioning from traditional server architectures to cloud services, the project can maintain its technological edge and reduce operational costs.

5. \*\*Detailed Documentation\*\*:

Comprehensive documentation facilitates understanding and execution by all team members and supports ongoing maintenance and future development. At the beginning of a project aimed at developing a customer relationship management system, the team meticulously documented every step of the requirements collection process, including meeting notes and change records. This not only helps new team members get up to speed quickly but also serves as a vital reference for future upgrades and maintenance tasks.

**Suppose you want to be a Business Analyst, list your own advantages and weakness of the essential analyst skills and knowledges for BA.**

优势：

1. 技术了解：我对软件开发技术有深入的了解，能够准确识别技术的限制和潜力。这种能力使您能够在设计解决方案时考虑到实际的技术可行性，从而提出更加切实可行的建议。
2. 了解年轻市场：作为00后，能够更好地理解年轻用户的需求和偏好，这是开发适合年轻人使用的软件产品的重要条件。这种洞察力对于设计能够吸引年轻用户的产品和功能尤为关键。

劣势：

1. 缺乏实际经验：作为业务分析师，实际经验对于理解复杂的商业环境和客户需求非常重要。缺乏实际经验可能意味着您在处理复杂项目或预见潜在问题方面可能会面临挑战。
2. 沟通能力欠佳：业务分析师的角色需要高效的沟通能力，以确保需求、解决方案和任何更改都能被所有利益相关者理解和接受。不足的沟通技巧可能会导致误解和项目延误。

\*\*Strengths:\*\*

1. \*\*Technical Understanding\*\*: I have an in-depth understanding of software development technology, enabling me to accurately identify technological limitations and potential. This capability allows me to consider the practical technical feasibility when designing solutions, thus providing more viable recommendations.

2. \*\*Understanding of the Youth Market\*\*: As a member of Generation Z, I can better understand the needs and preferences of young users, which is crucial for developing software products suitable for this demographic. This insight is particularly key in designing products and features that attract young users.

\*\*Weaknesses:\*\*

1. \*\*Lack of Practical Experience\*\*: As a business analyst, practical experience is crucial for understanding complex business environments and client needs. A lack of practical experience may mean facing challenges in handling complex projects or anticipating potential issues.

2. \*\*Poor Communication Skills\*\*: The role of a business analyst requires effective communication skills to ensure that all stakeholders understand the requirements, solutions, and any changes. Insufficient communication skills can lead to misunderstandings and project delays.