

American International University- Bangladesh (AIUB) Department of Computer Science

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**Final Assignment**

Submitted to

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##### Subject: SOFTWARE DEVELOPMENT PROJECT MANAGEMENT

##### Section: (B)

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**1**

**Risk:** An ambiguous event or state that, if it occurs, incorporates a positive or negative effect on a project’s objectives’ is named risk.

* **Differentiate reactive and proactive risk:**
* **Reactive:**

• Project team reacts to risks after they occur

• Mitigation—plan for extra resources in expectation of fireplace fighting

• Fix on failure—reserve is found and functional when the chance strikes

• Crisis management—catastrophe doesn't reply to practical resources and project is in threat.

* **Proactive:**

• Proper risk analysis is formed.

• Association modifies the origin causes of risk.

• TQM perceptions and statistical SQA.

• Investigative risk sources that lie beyond the boundaries of the software.

• Developing the skill to manage change.

**2**

**Different categories (Technological risk, Operational risk):**

**Technical Risks**: Technical risks generally cause failure of functionality and performance. Causes of Technical Risks are:

• Continuous changing requirements

• No advanced technology available or the present technology is within the initial stages.

• The product is complex to implement.

• Difficult project modules integration.

**Operational Risks**: Risks of loss because of improper process execution failed system or some external events risks. Causes of Operational Risks:

• Failure to deal with priority conflicts

. • Failure to resolve the responsibilities.

• Insufficient resources.

• No proper subject training.

• No resource planning.

• No communication within the team.

***Budget Risk*:** Wrong budget estimation or Project scope expansion ends up in Budget / Cost Risk. This risk may result in either a delay within the delivery of the project or sometimes even an incomplete closure of the project.

**Business Risk**: Non-availability of contracts or papers at the beginning of the project or delay in receiving proper inputs from the customer or business analyst may result in business risks.

**Technical Environment Risk**: These are the risks associated with the environment under which both the client and thus the customer work. as an example, constantly changing development or production or testing environment may find yourself during this risk.

**Information Security Risk**: The risks associated with the protection of knowledge like confidentiality or integrity of customer’s personal / business data. The Access rights / privileges failure will result in leakage of confidential data.

**Programmatic Risks:** The outside risks elsewhere the operational bounds. These are outside the control of the program. These external events are additionally Running out of fund or Changing customer product strategy and priority or Government rule changes etc.

**Infrastructure Risk:** Inappropriate preparation of substructure / resources may affect in risks connected with measured network connectivity or complete failure of connectivity at both the client and thus the customer positions. So, it's important to undertake and do proper planning of infrastructure for the efficient development of a project.

**Quality and Process Risk**: This risk occurs cheers to Improper request of procedure modifying and nonconformity guidelines. New workers assigned to the project not skilled inside the excellence procedures and events accepted by the association.

**Technology Risk**: it's associated with the entire change in technology or introduction of a replacement technology.

**Risk for the project:**

1. Requirements change of clients: this can be an oversized problem for development jobs additionally as testing jobs.

2. Budget issues: because of lack of resources or time that increases cost. the look failed to work because it was presupposed to do.

3. Lack of software testing tools: Advanced or update software testing tools makes testing easier, reliable, saves time.

4. Understanding of team member with incomplete or inappropriate requirements. 5. Shortage of staff in development and testing team.

**Levels of risks:**

**Catastrophic Risk**:

1. Failure to satisfy the necessity would lead to mission failure.

2.Significant degradation to nonachievement of technical performance.

3.Failure ends up in increased in costs schedule delays with values in way over $500k.

4. Nonresponsive or unsupportable software.

5.Significant financial shortages, budget overrun likely.

**Marginal Risk:**

1. Failure to satisfy the necessity would lead to degradation of a secondary mission.
2. Minimal to small reduction in technical performance.

3.Costs impacts and /or recoverable schedule slips with mean of $1k to $100k.

4.Responsive or unsupportable software.

5.Sufficent financial recourses.

**Critical**:

1.Failure to satisfy the necessity would degrade system performance to a degree where mission success is questionable.

2.Some reduction in technical performance.

3.Failure leads to operational delays or increased costs with arithmetic mean of $1k to $1ook

4.Minor delays in software modifications.

5.Some shortage of economic resources, possible overruns.

**Negligible**:

1.Failure to satisfy the necessity would create inconvenience impact.

2. No reduction in technical performance.

3. Error leads to minor cost and increased costs with arithmetic mean of $1k.

4. Easily supportable software.

5. possible budget underrun.