



Tutorial notes: Making a Risk Management Plan

- **Identify Risks**
 - ↳ E.g. Use fault tree analysis
- **Compare the risks**
 - ↳ Assess risk exposure for each risk
- **Draw up a top ten list**
 - ↳ Includes strategies to deal with each risk

[Portions of this presentation adapted from course material by Barry Boehm and Dan Port at USC]



"If You Don't Actively Attack the Risks,



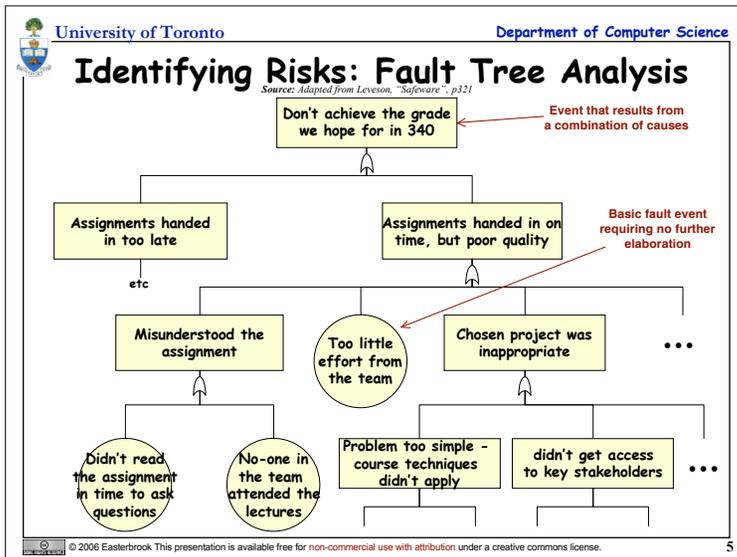
The Risks Will Actively Attack You."

-Tom Gilb



Candidate CS340 Risk Items

- **Personnel:**
 - ↳ commitment;
 - ↳ compatibility;
 - ↳ ease of communication;
 - ↳ skills (management, Web/Java, writing, modeling, domain expertise, ...)
- **Schedule:**
 - ↳ meeting assignment deadlines,
 - ↳ scheduling interactions with customer;
 - ↳ etc
- **Scope:**
 - ↳ project too big / too small;
- **Customer engagement**
- ... etc ...



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Risk Assessment

→ Identify your own scale for amount of loss
↳ What's the worst possible outcome? What lesser versions of this outcome can you identify?

		Likelihood of Occurrence		
		Very likely	Possible	Unlikely
Undesirable outcome	(5) Fail the course	Catastrophic	Catastrophic	High
	(4) Very poor grades	Catastrophic	High	High
	(3) Okay grades, after lots of extra work	High	High	Moderate
	(2) Minor impact on grades	Moderate	Moderate	Low
	(1) Inconvenience	Moderate	Low	Low

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Risk Reduction Strategies

Risk	Risk Aversion Options	Risk Monitoring
1. Inability to access the key stakeholders.	Option 1: Agree list of interviewees in initial negotiations with customer organisation Option 2: Introduce redundancy: interview more than one person for each key stakeholder role	Set up schedule for completing interviews, and monitor any slippage
2. Tight Schedule	Scope the problem carefully so as not to overcommit. Descope size of problem if possible. Concentrate on core capabilities.	Close monitoring of all activities is necessary to ensure that schedule are met.
3. Lack of team coordination	Option 1: F2F meeting every other day Option 2: Each team member emails daily status reports to others Option 3: ...	Option 1: Monitor number of scheduled meetings that are postponed or cancelled. Option 2: Track time since last contact for each team member
4.

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Tracking your Top ten risks

Risk Item	Weekly Ranking			Risk Resolution Progress
	This	Last	#wks	
Replacing Sensor-Control Software Developer	1	4	2	Top Replacement Candidate Unavailable
Target Hardware Delivery Delays	2	5	2	Procurement Procedural Delays
Sensor Data Formats Undefined	3	3	3	Action Items to Software, Sensor Teams; Due Next Month
Staffing of Design V&V Team	4	2	3	Key Reviewers Committed; Need Fault-Tolerance Reviewer
Software Fault-Tolerance May Compromise Performance	5	1	3	Fault Tolerance Prototype Successful
Accommodate Changes in Data Bus Design	6	-	1	Meeting Scheduled With Data Bus Designers
Testbed Interface Definitions	7	8	3	Some Delays in Action Items; Review Meeting Scheduled
User Interface Uncertainties	8	6	3	User Interface Prototype Successful
TBDs In Experiment Operational Concept	-	7	3	TBDs Resolved
Uncertainties In Reusable Monitoring Software	-	9	3	Required Design Changes Small, Successfully Made

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