software studio

final project outline

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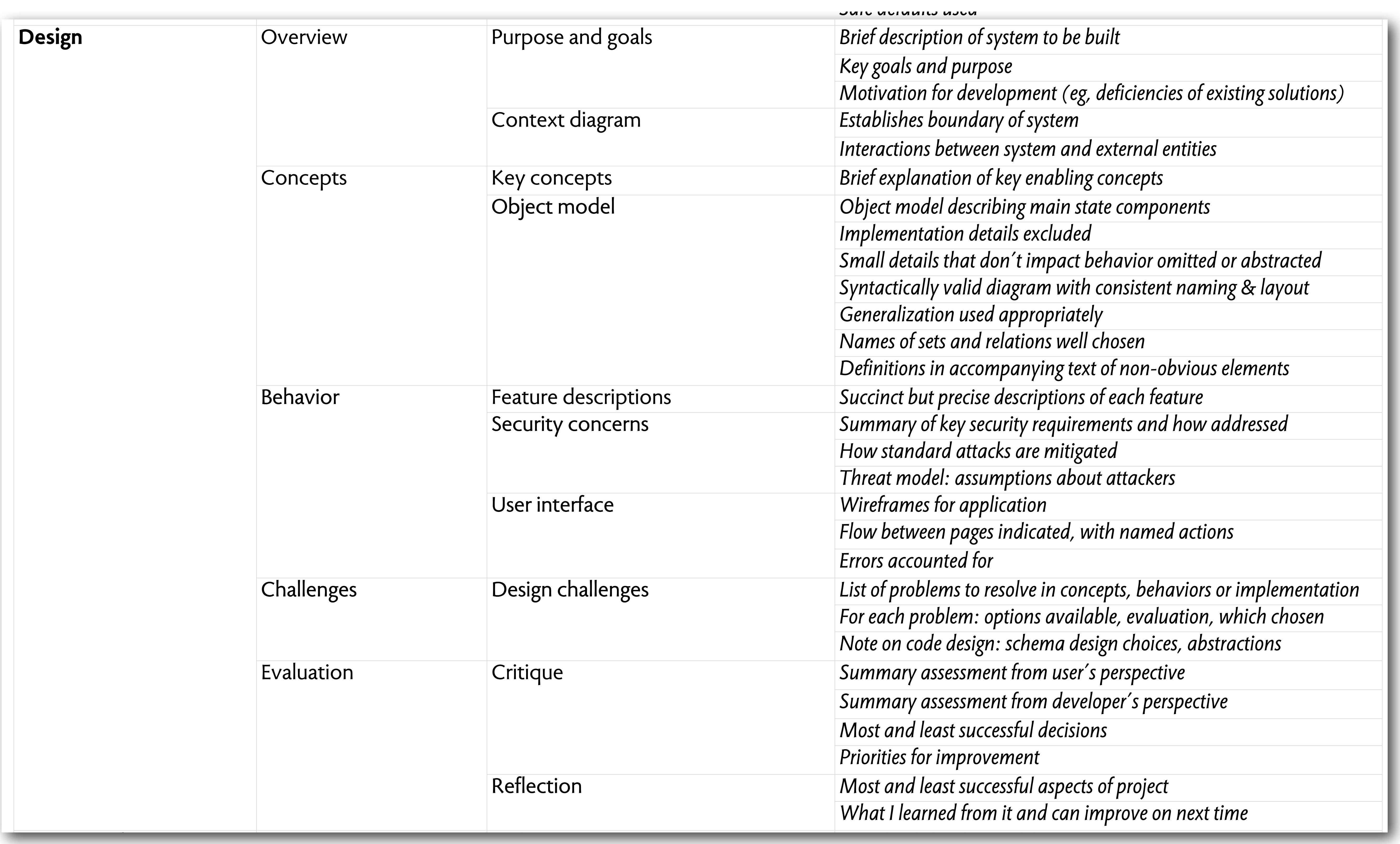
same old, same old



			Safe defaults used
Design	Overview	Purpose and goals	*Brief description of system to be built*
			Key goals and purpose
			Motivation for development (eg, deficiencies of existing solutions)
		Context diagram	*Establishes boundary of system*
			Interactions between system and external entities
	Concepts	Key concepts	*Brief explanation of key enabling concepts*
		Object model	*Object model describing main state components*
			Implementation details excluded
			Small details that don't impact behavior omitted or abstracted
			Syntactically valid diagram with consistent naming & layout
			Generalization used appropriately
			Names of sets and relations well chosen
			Definitions in accompanying text of non-obvious elements
	Behavior	Feature descriptions	*Succinct but precise descriptions of each feature*
		Security concerns	*Summary of key security requirements and how addressed*
			How standard attacks are mitigated
			Threat model: assumptions about attackers
		User interface	*Wireframes for application*
			Flow between pages indicated, with named actions
			Errors accounted for
	Challenges	Design challenges	*List of problems to resolve in concepts, behaviors or implementation*
			For each problem: options available, evaluation, which chosen
			Note on code design: schema design choices, abstractions
	Evaluation	Critique	*Summary assessment from user's perspective*
			Summary assessment from developer's perspective
			Most and least successful decisions
			Priorities for improvement
		Reflection	*Most and least successful aspects of project*
			What I learned from it and can improve on next time

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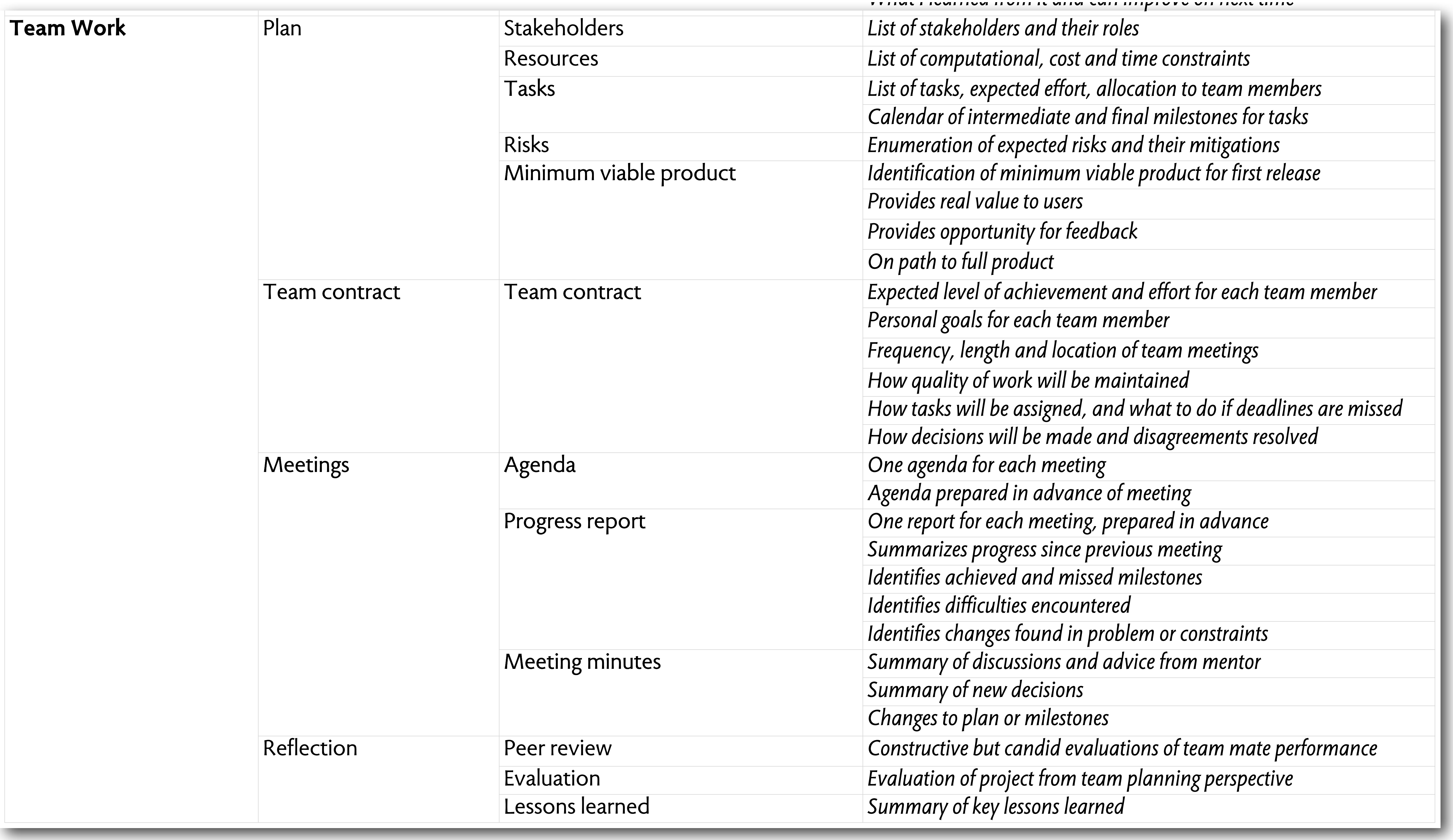

Team Work	Plan	Stakeholders	*List of stakeholders and their roles*
		Resources	*List of computational, cost and time constraints*
		Tasks	*List of tasks, expected effort, allocation to team members*
			Calendar of intermediate and final milestones for tasks
		Risks	*Enumeration of expected risks and their mitigations*
		Minimum viable product	*Identification of minimum viable product for first release*
			Provides real value to users
			Provides opportunity for feedback
			On path to full product
	Team contract	Team contract	*Expected level of achievement and effort for each team member*
			Personal goals for each team member
			Frequency, length and location of team meetings
			How quality of work will be maintained
			How tasks will be assigned, and what to do if deadlines are missed
			How decisions will be made and disagreements resolved
	Meetings	Agenda	*One agenda for each meeting*
			Agenda prepared in advance of meeting
		Progress report	*One report for each meeting, prepared in advance*
			Summarizes progress since previous meeting
			Identifies achieved and missed milestones
			Identifies difficulties encountered
			Identifies changes found in problem or constraints
		Meeting minutes	*Summary of discussions and advice from mentor*
			Summary of new decisions
			Changes to plan or milestones
	Reflection	Peer review	*Constructive but candid evaluations of team mate performance*
		Evaluation	*Evaluation of project from team planning perspective*
		Lessons learned	*Summary of key lessons learned*

cool new part: team work!

team contract

not grunt work

› real opportunity to prevent disaster

› so use it!

team member expectations

› all want A+ in 6170 and transition project to startup

› all happy to scrape by with a C and enjoy the weather

what we'll do if…

› we disagree

› someone slacks off

weekly meetings with TA mentors

all team members must attend

- missing meetings will affect your grade
- and seriously annoy your team mates

TA mentors are consultants

- they won't direct the meeting
- your job to make it useful

must prepare in advance

- agenda for meeting
- progress report: good and bad

must record meeting

- brief but concise minutes
- focus on key decisions and assignments

presentation schedule

will be graded!

initial project pitch

- Weds April 17, in class

demo of minimal viable product (MVP)

- Mon April 29, in class

demo of final product at project fair

- Weds May 8, in class

initial pitch contents

purpose, goals, context

› WHY?

key concepts, features, challenges

› WHAT?

risks and their mitigations

› HOW?

6.170 Software Studio
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