



# Product Development

Techie Pizza #44267  
Project, Lesson 3  
Michael Lyle



# How is a product developed?



Idea

# How is a product developed?

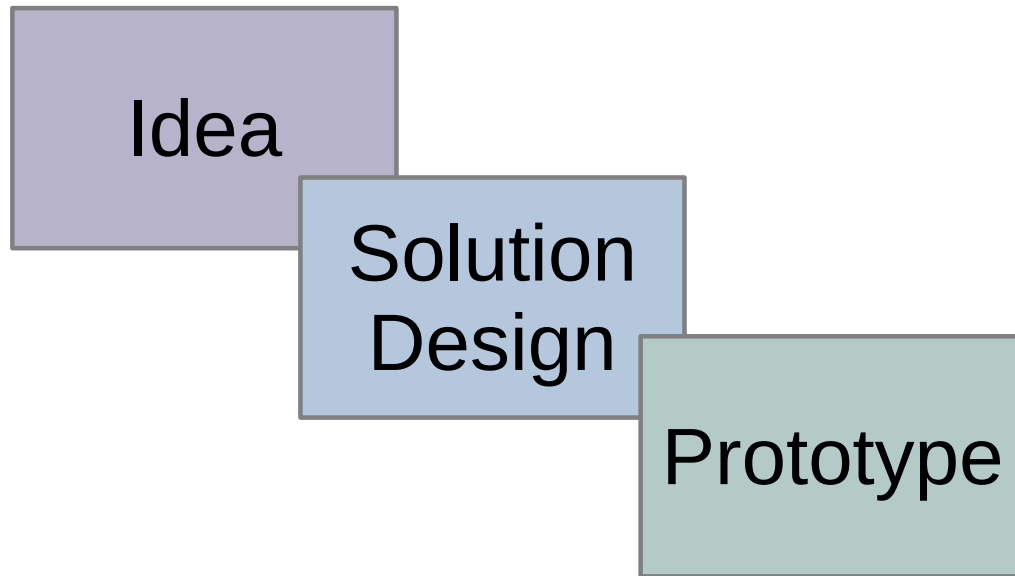


Idea

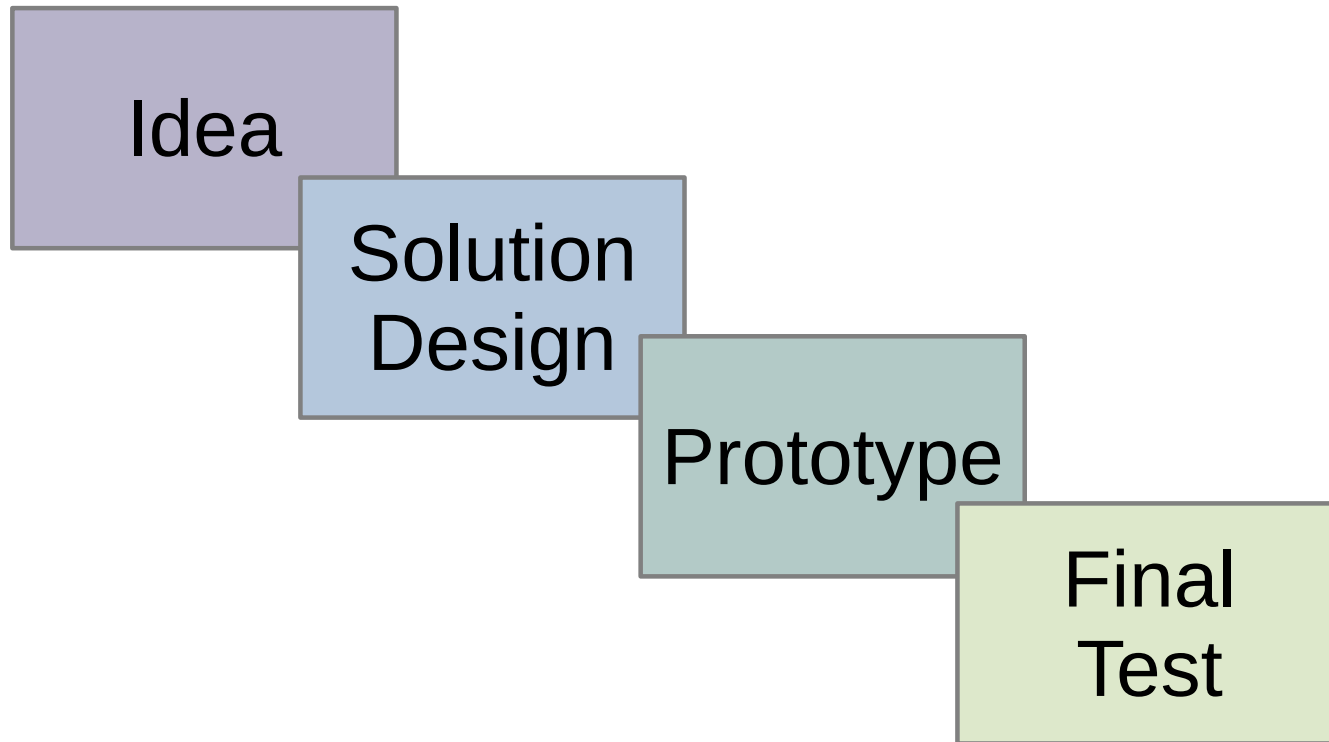
The diagram consists of two overlapping rectangular boxes. The first box, on the left, is light purple and contains the word 'Idea'. The second box, on the right, is light blue and contains the words 'Solution' and 'Design' stacked vertically. The right side of the purple box overlaps with the left side of the blue box, indicating a sequential flow from the idea stage to the solution design stage.

Solution  
Design

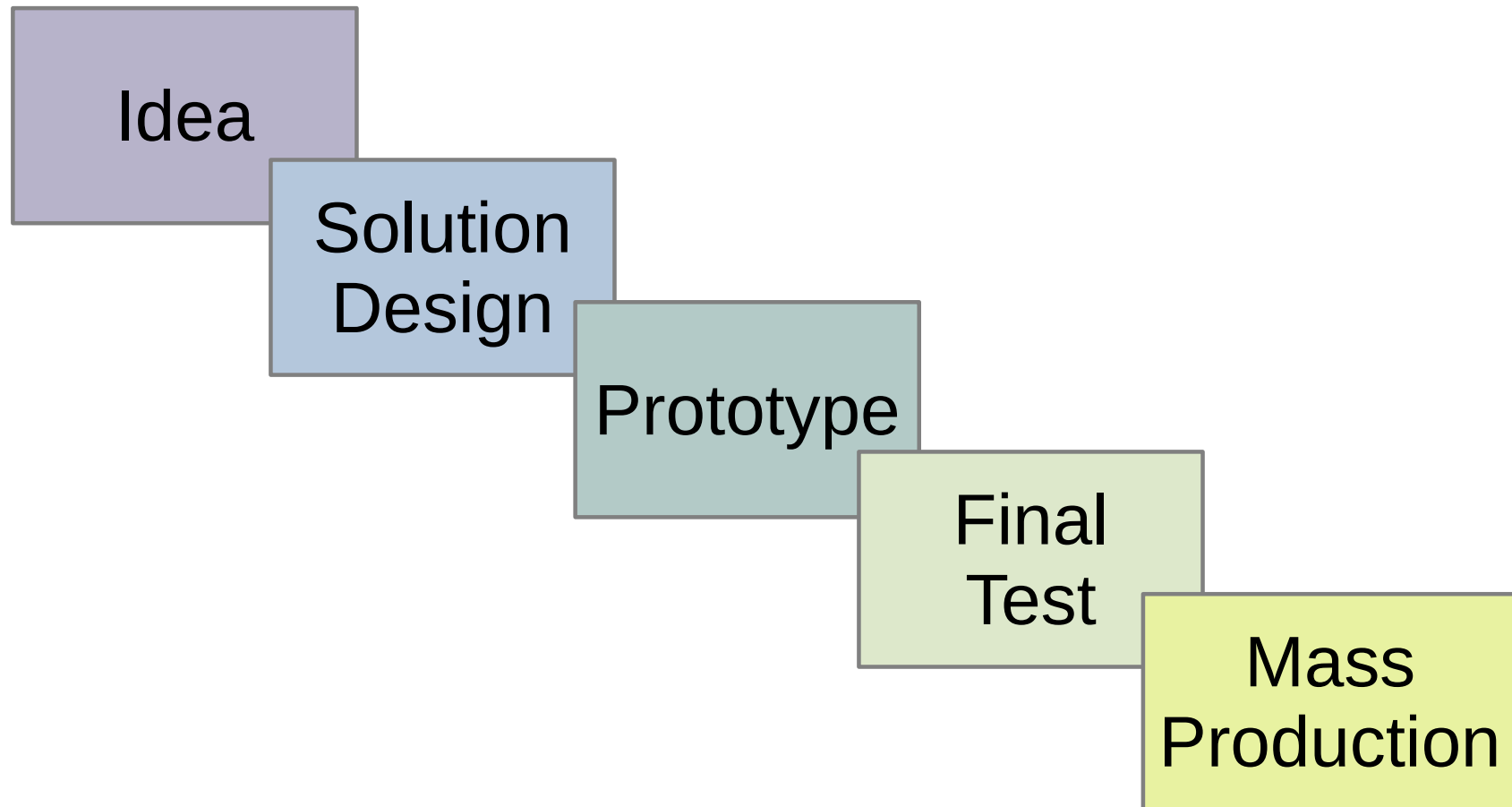
# How is a product developed?



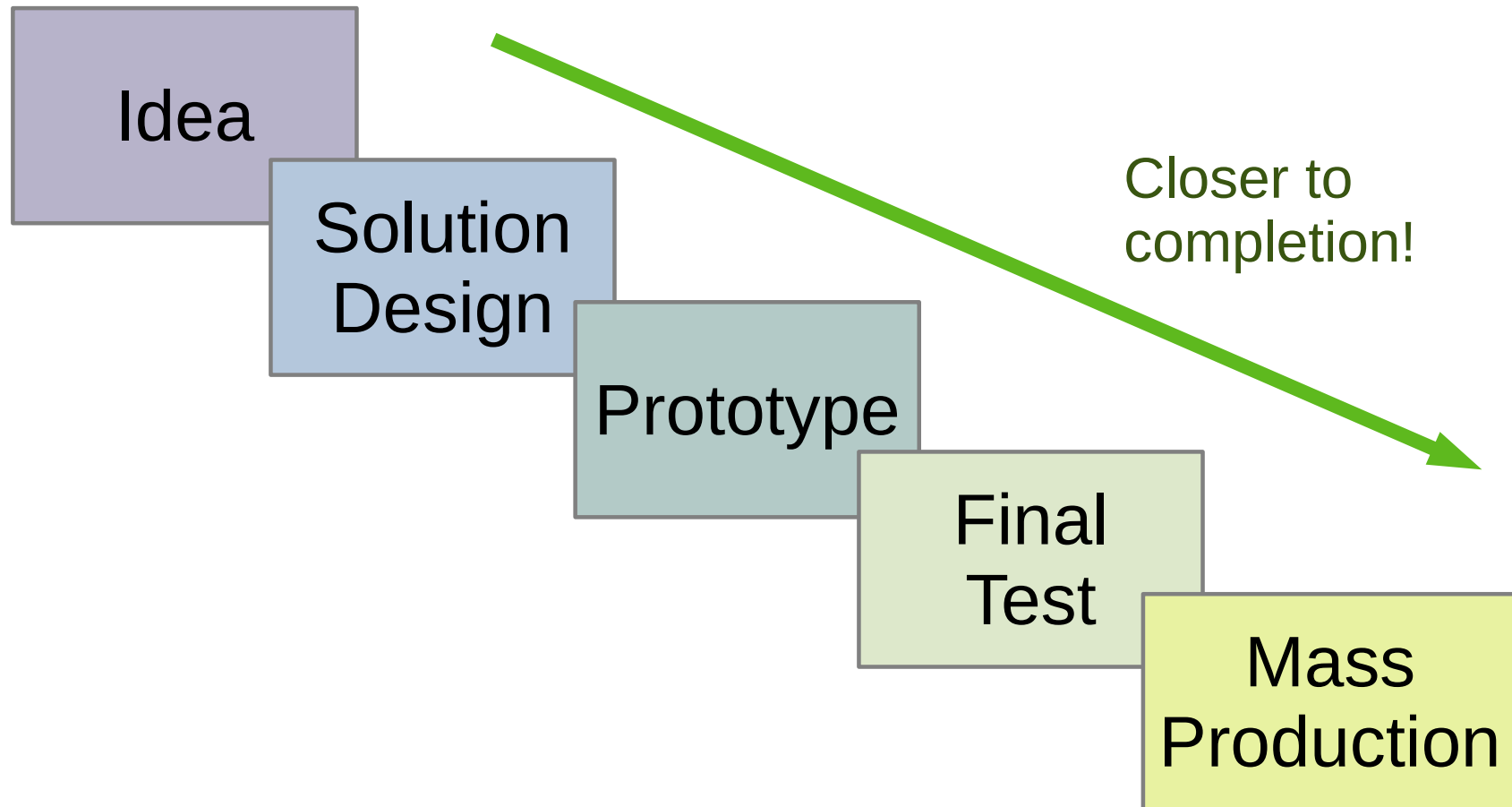
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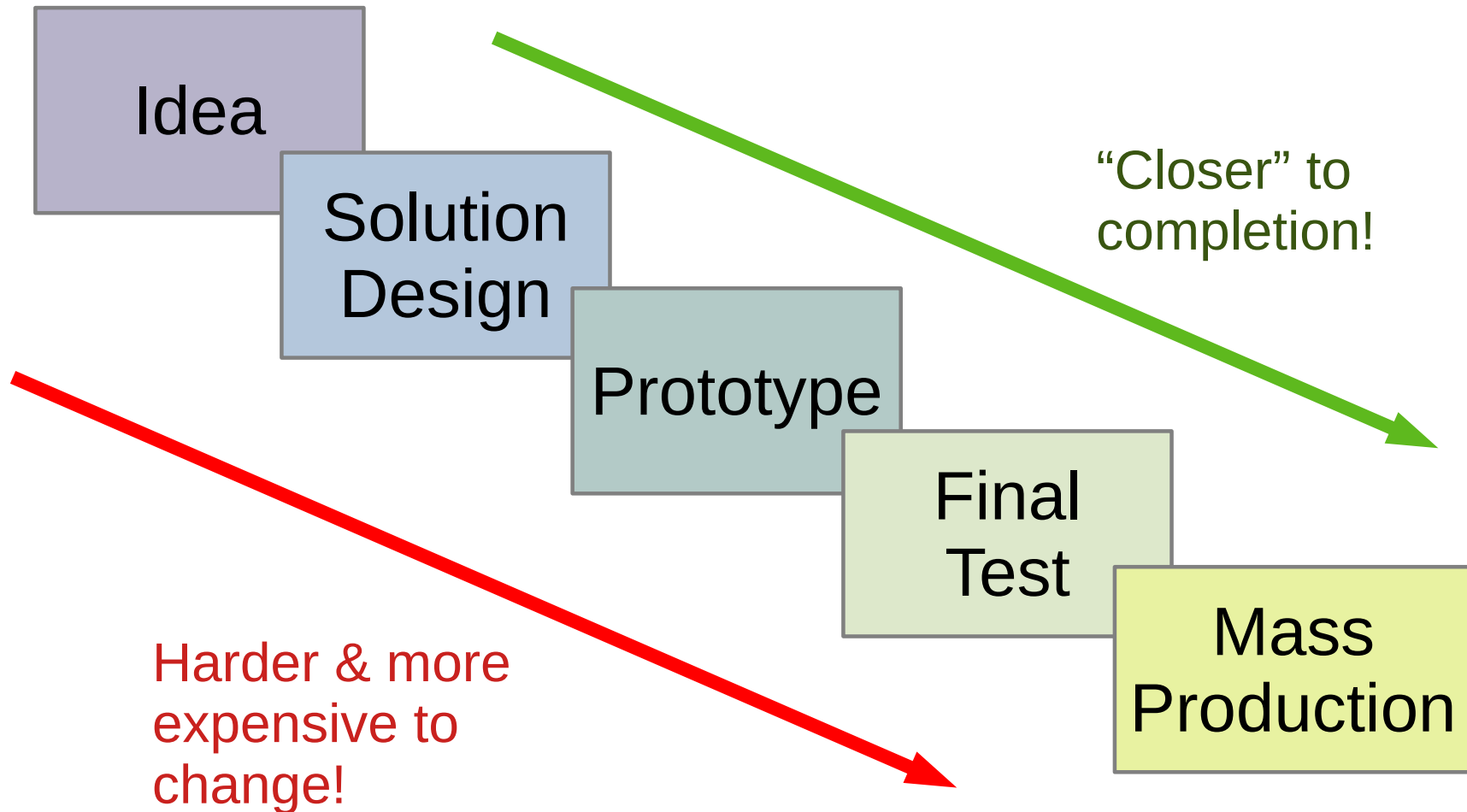
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## **Risk:**

All the things that can go wrong, whether we know about them or not.

Feedback and testing removes risk.

Making changes (even good changes) increases risk until testing proves the changes safe.

Since later stages make it harder to change, even doing nothing increases risk.



# **Risk:**

Two major causes of risk:

Putting together (“integrating”) the pieces too late.

Starting with too ambitious of an idea in the beginning; it is better to start small and build up.

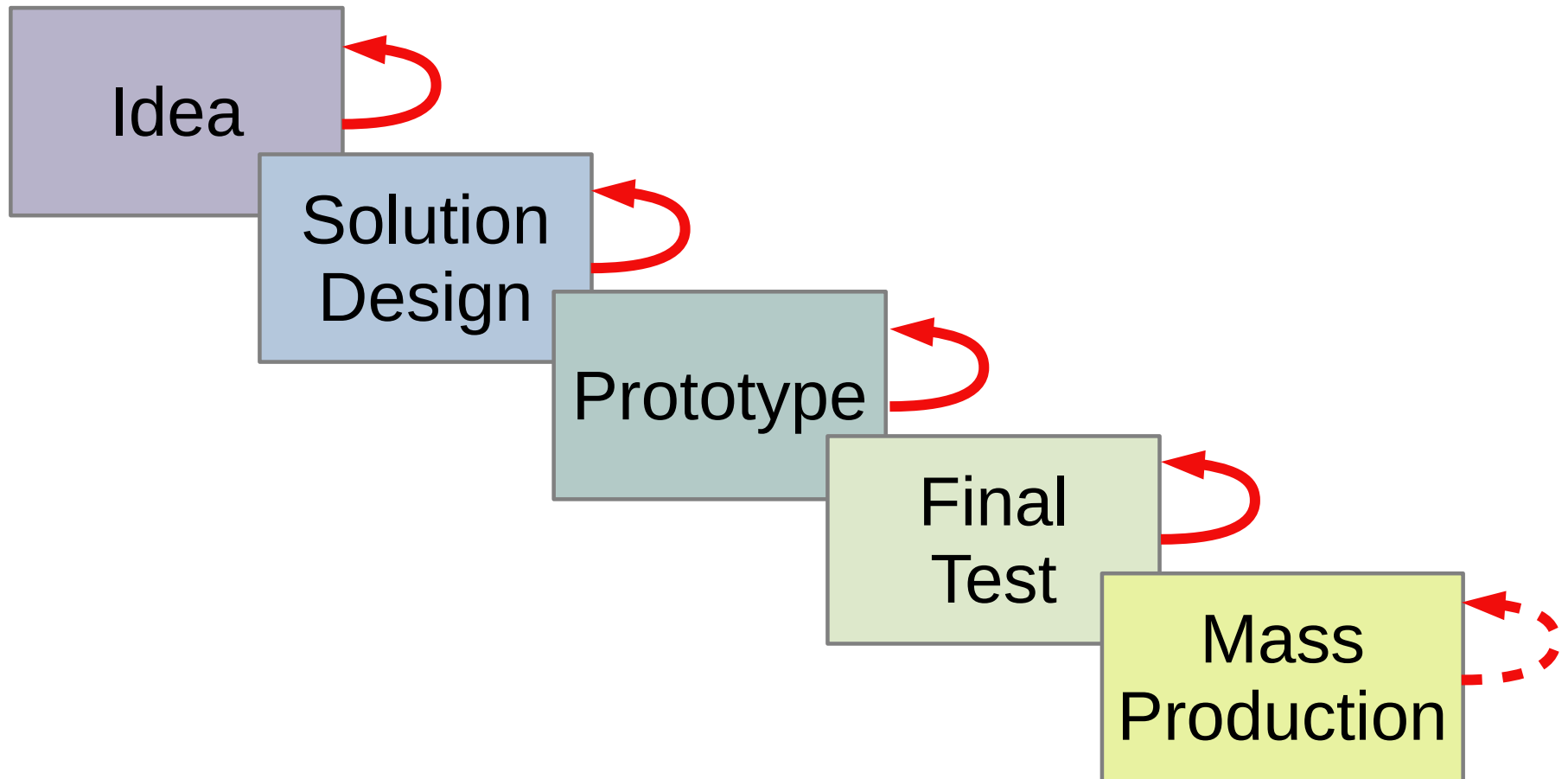


## **Risk:**

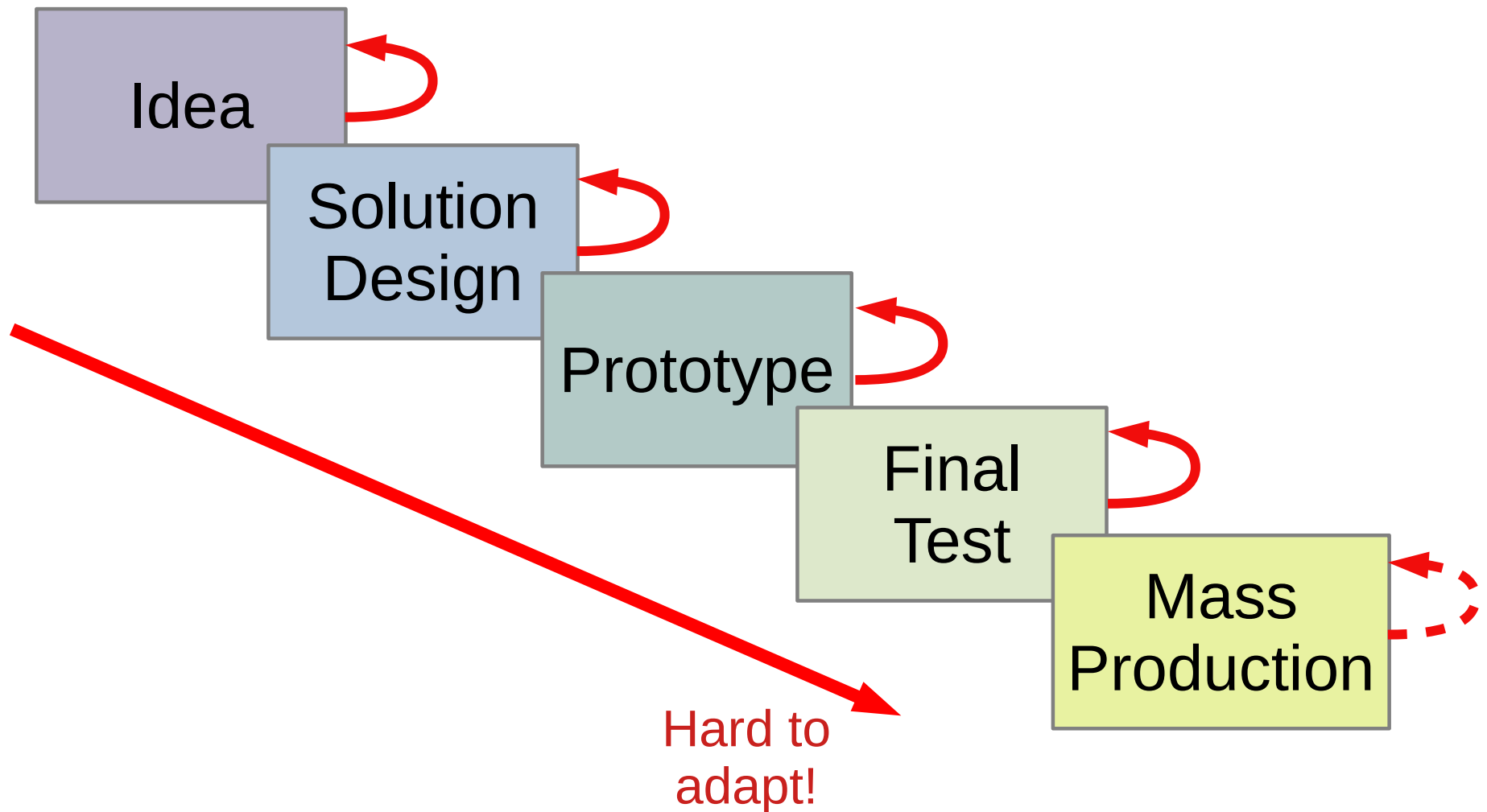
You win by advancing in stage (to prototype, final test, and production) without too much risk.

You lose by running out of time.

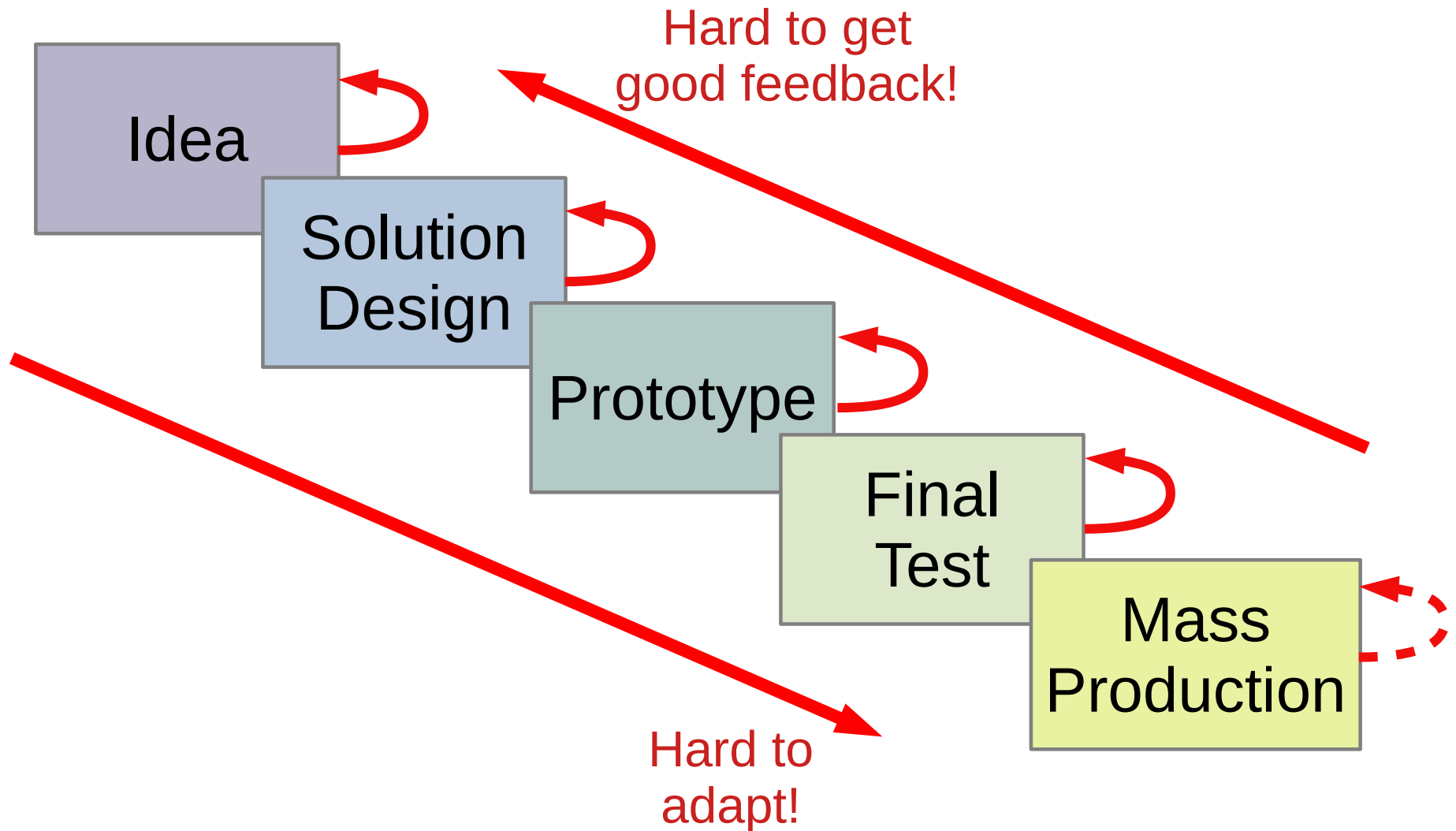
# Refinement and iteration



The sooner we get (and react to) feedback, the better.



Some kinds of feedback are possible only in later stages.



# Global Innovation Award rubric

<b>Solution Development</b>	<b>Use of a systematic process to develop the solution, where alternative solutions are considered and narrowed, the chosen solution is evaluated and improved, feasibility of process solutions assessed</b>		
process AND explanation need improvement	process OR explanation need improvement	systematic and well-explained, including evaluation or verification	process uses evaluation or verification across multiple steps

**The rubric explicitly requires cycles of feedback and improvement in the development process.**



# Global Innovation Award rubric vs. Qualifier Tournament rubric

<b>Solution Development</b>	<b>Use of a systematic process to develop the solution, where alternative solutions are considered and narrowed, the chosen solution is evaluated and improved, feasibility of process solutions assessed</b>		
process AND explanation need improvement	process OR explanation need improvement	systematic and well-explained, including evaluation or verification	process uses evaluation or verification across multiple steps

<b>Solution Development</b>	<b>Systematic process used to select, develop, evaluate, test, and improve the solution (Implementation could include cost, ease of manufacturing, etc.)</b>			
N D	process AND explanation need improvement	process OR explanation need improvement	systematic process included evaluation	systematic process included evaluation; implementation considered

**The judging standard for process is stricter for Global Innovation than at Qualifier Tournaments.**

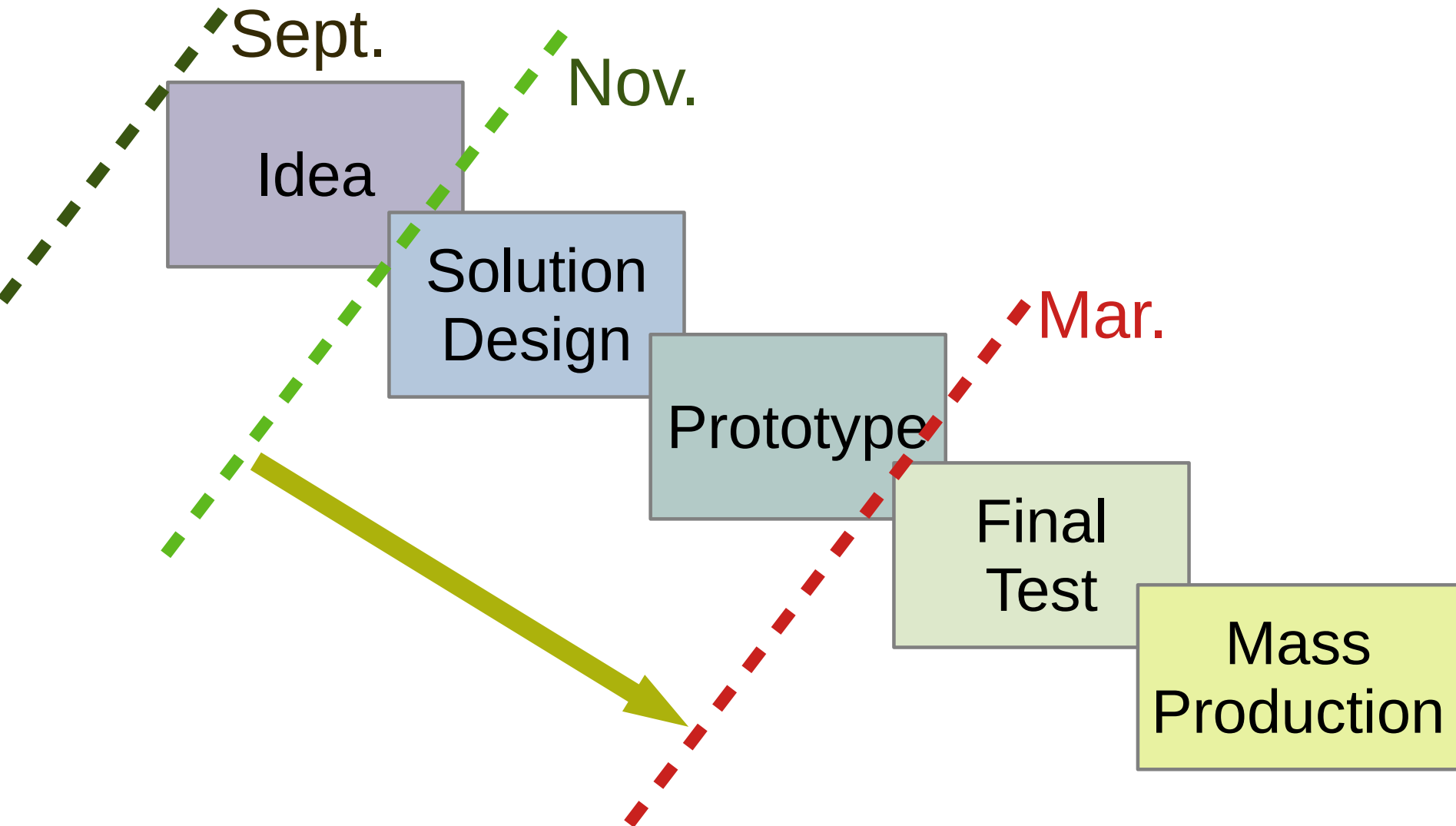


# Global Innovation Award rubric vs. Qualifier Tournament rubric

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**The team will need to be able to tell the judges about this product development process.**

# Techie Pizza innovation status



# Techie Pizza innovation status

Sep.

Nov.

Mar.

**Solution Development**

**Use of a systematic process to develop the solution, where alternative solutions are considered and narrowed, the chosen solution is evaluated and improved, feasibility of process solutions assessed**

process AND explanation need improvement

process OR explanation need improvement

systematic and well-explained, including evaluation or verification

process uses evaluation or verification across multiple steps

