

Software Engineering

How To Create Software Products Everyone Loves!

Module 0

Introduction to Software Engineering

Ali Samanipour

Shiraz University of Technology
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Ali Samanipour
[linkedin.com/in/Samanipour](https://www.linkedin.com/in/Samanipour)

Session Roadmap

- 1 Introduction
- 2 What is Software?
- 3 A Software Product Development Team
- 4 Course References

Before Start!

Lets **know** each other!

Class Rules

**Learn by doing,
instead of read and
memorize**

**Collaborate and be
active**

**Everything
depends on you**

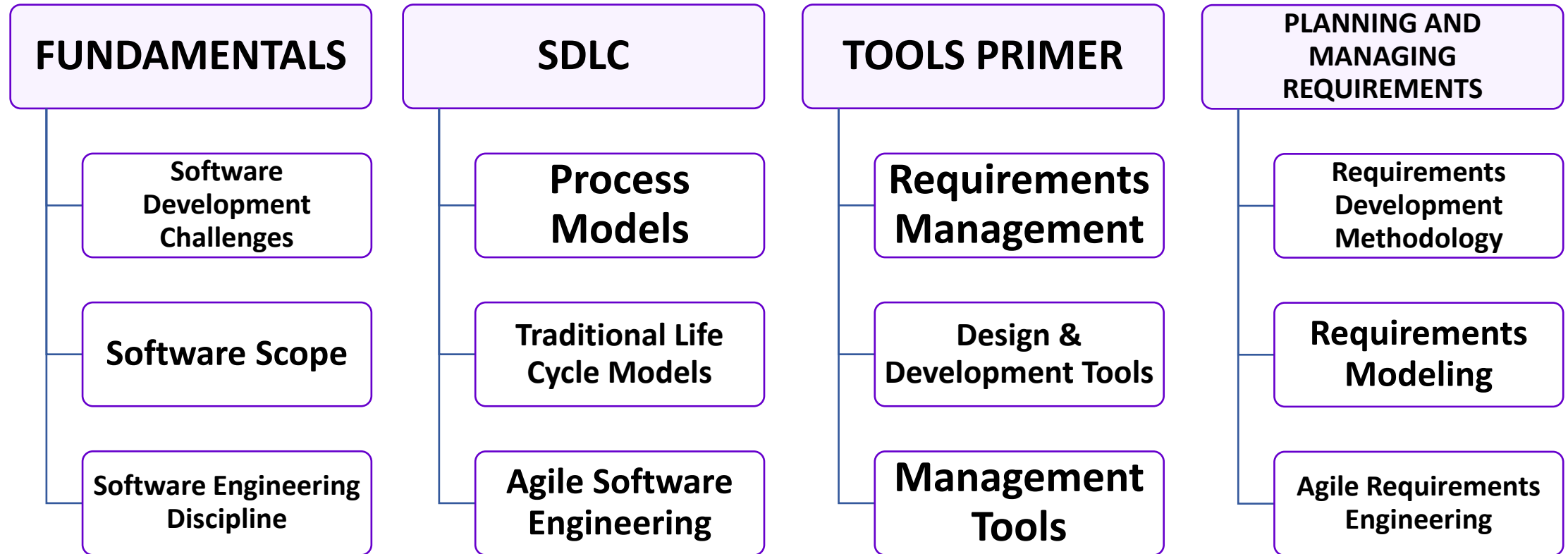


**Some people
want it
to happen.**

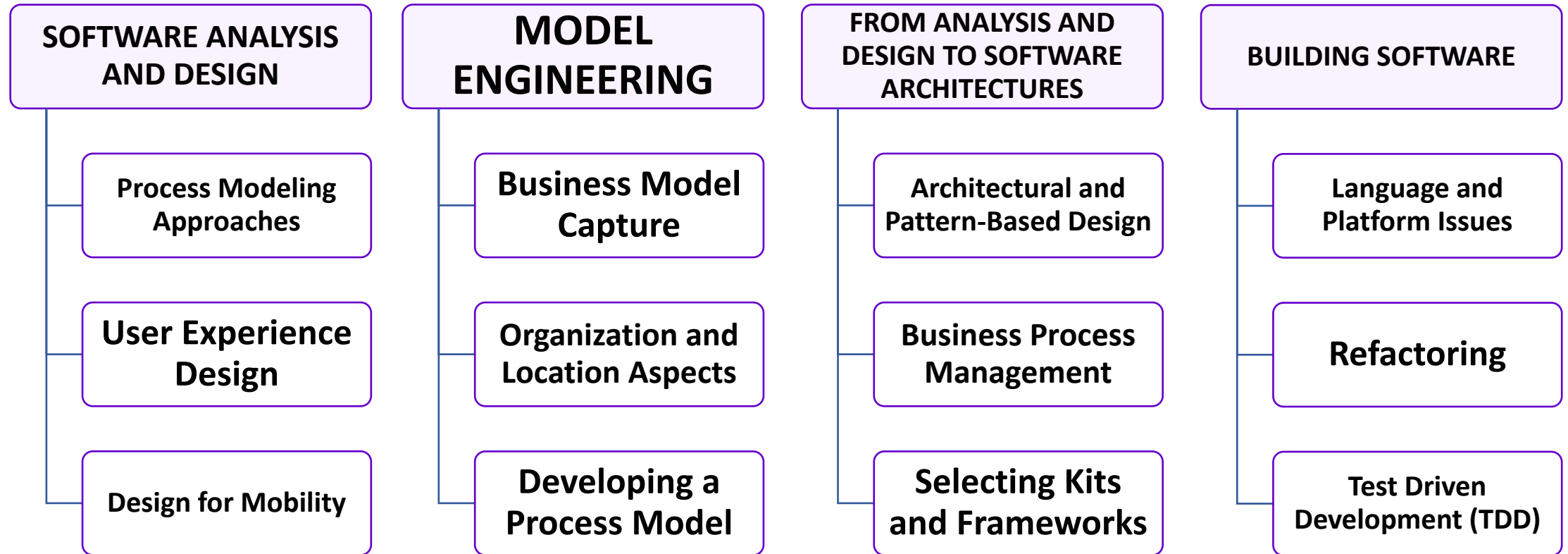
**Some wish
it would
happen.**

**Others make
it happen.**
@successpictures

Course Sessions



Course Sessions ...



Course Sessions ...



Why? Why should we need to learn all of those topics?

To Answer This:

*How Should We Make (Develop) a
(Good) Software?*

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When we could say we engineering something?

We can say something has been engineered when a systematic, iterative **process** is used to design and build a solution to a problem, **applying scientific principles** and **considering a defined set of requirements** and constraints.

Before Start: Lets Review Some Basics!

In terms of project management perspective, what are the main differences between a Computer Program and a Software Product?

What is Software?

In general we could say, **software is a product**, like an automobile, but it's **digital**

Software is a computer program(**Codes**) that **enable us to use any computerized device for specific purposes**

Software Product Types

System Software

The programs that control and manage the basic operations of a computer

- Operating Systems
- Utility Programs
- Software Development Tools

Application Software

Programs that make a computer useful for everyday tasks are known as application software. These are the programs that people normally spend most of their time running on their computers.

Some Software Platforms



PCs and Laptops



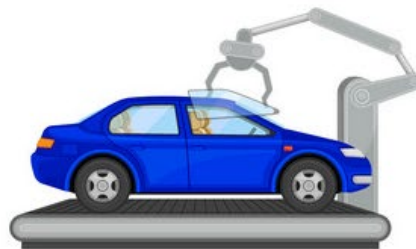
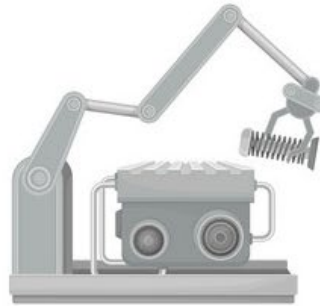
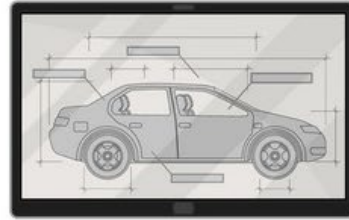
Mobile and Tablets



Web Servers

Production Line

Can we develop a complex product all at once?



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A software production line!

1.
Plan



Product
owner

Product
manager



2.
Analysis



Project
manager

Software
architecture



3.
Design

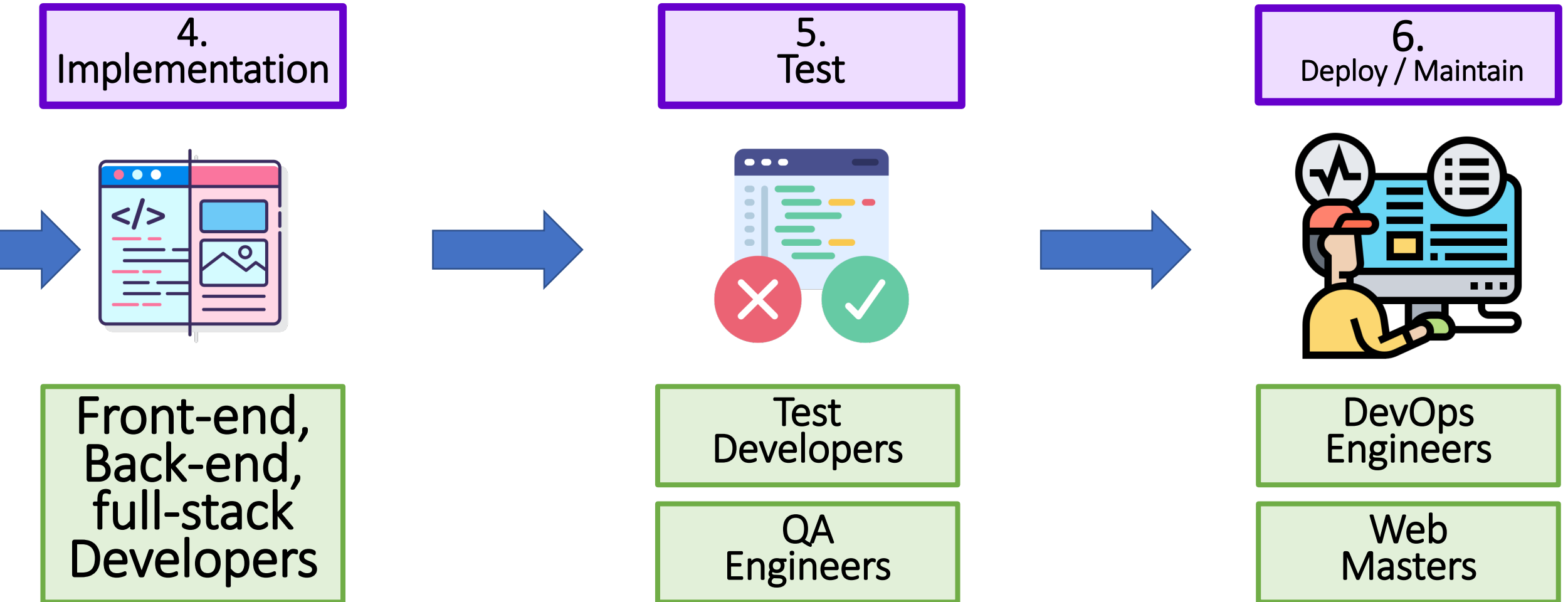


UI/UX
Designer

Technical
Designer



A software production line!



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