

### Week of March 27:

- 1) Intro
- 2) OOP. Deliverable: in-class OOP activity

### Week of April 10:

- 1) SOLID
- 2) Design Patterns: Adapter
- 3) Design Patterns: Builder
- 4) Design Patterns Singleton + Advanced Python, Observer

### Week of April 17:

- 1) Design Patterns: Decorator + Flyweight
- 2) Design Patterns: MVC
- 3) Tiers, Web Architecture, Monolith vs Microservice
- 4) Project Work time (Due Monday!)

### Week of April 24:

- 1) Availability, Scalability, Project work
- 2) Load balancing, Caching
- 3) AWS Lambda Functions, Serverless Architecture: Lecture + in-class work
- 4) Message Queues (with AWS/GCP examples?)
- 5) Testing (incl Github Setup)

### Week of May 1:

- 1) Event-Driven Architecture (with AWS examples), Shared-nothing Architecture
- 2) Stream Processing, P2P
- 3) Guest Lecturer: Startup 101

### Week of May 8: **SEMANA TEC. No class**

### Week of May 15:

- 1) Webhooks, Federated architecture
- 2) Possible: Reverse Engineering Day (Case Studies)
- 3) How to get and keep a job in industry

### Week of May 22:

- 1) Class Project Work time
- 2) Deliverable: Class project final

### Week of May 29:

- 1) Class work time

### Week of June 6:

- 1) Final Exam

### Week of June 15:

- 1) Presentations, final exams