BIM492 Design Patterns

ANADOLU UNIVERSITY

0.0 Course Info

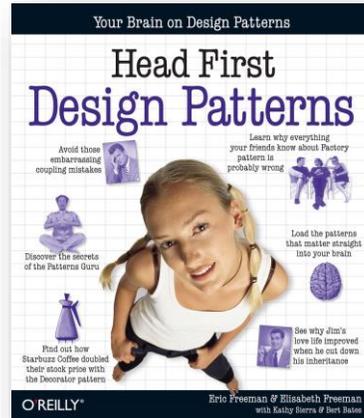Instructor : Alper Bilge
TA : Gökhan Çıplak
Time : Mondays 2-5pm
Location : Classroom B1

Grading

- 2 MTs – 15% each
- Final – 40%
- Assignments & Quizzes – 30%
    - 3 original projects
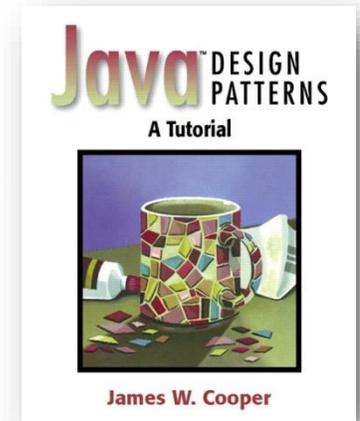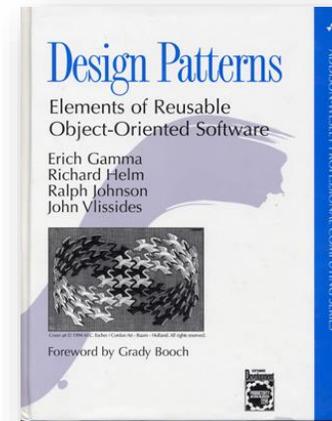   (to be submitted before exams)
    - Several pop-up quizzes

Books

Head First: Design Patterns

To the Gang of Four, whose insight and expertise in capturing and communicating Design Patterns has changed the face of software design forever, and bettered the lives of developers throughout the world.

Design Patterns:
Elements of Reusable
Object-Oriented Software

Java™ Design Patterns:
A Tutorial

Who is this class for?

If you can answer "YES" to <u>all</u> of these:

I.   Do you know **Java**? (You don't need to be a guru.)   *You'll probably be okay if you know C# instead.*

II.   Do you want to **learn**, **understand**, **remember**, **and apply** design patterns, including the OO design principles upon which design patterns are based?

III.   Do you prefer stimulating dinner party conversation to dry, dull, academic lectures?

IV.   Do you enjoy **reading** and **contemplating**?

Who should drop the course right away?

If you can answer "YES" to <u>any one</u> of these:

I.   Are you completely new to **Java**?
- ✓ don't need to be an expert
- ✓ C# and C++ are also 80% OK

II.   Are you a kick-butt OO designer/developer and looking for a **reference book**?

III.   Are you an architect looking for **enterprise** design patterns?

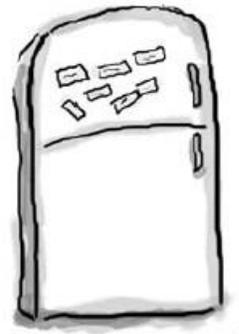IV.   Are you **afraid to try something new and think differently**?

So, here's what YOU can do

- **Slow down**. The more you understand, the less you have to memorize.
  - don't just follow me, stop and think.
- **Do** the exercises throughout the class. Write your own notes.
  - use a pencil.
- **Be careful** on "There are No Dumb Questions" parts.
  - they are part of the core content!
- **Review** what you have learned each week after class and make this the last thing before you go to bed.
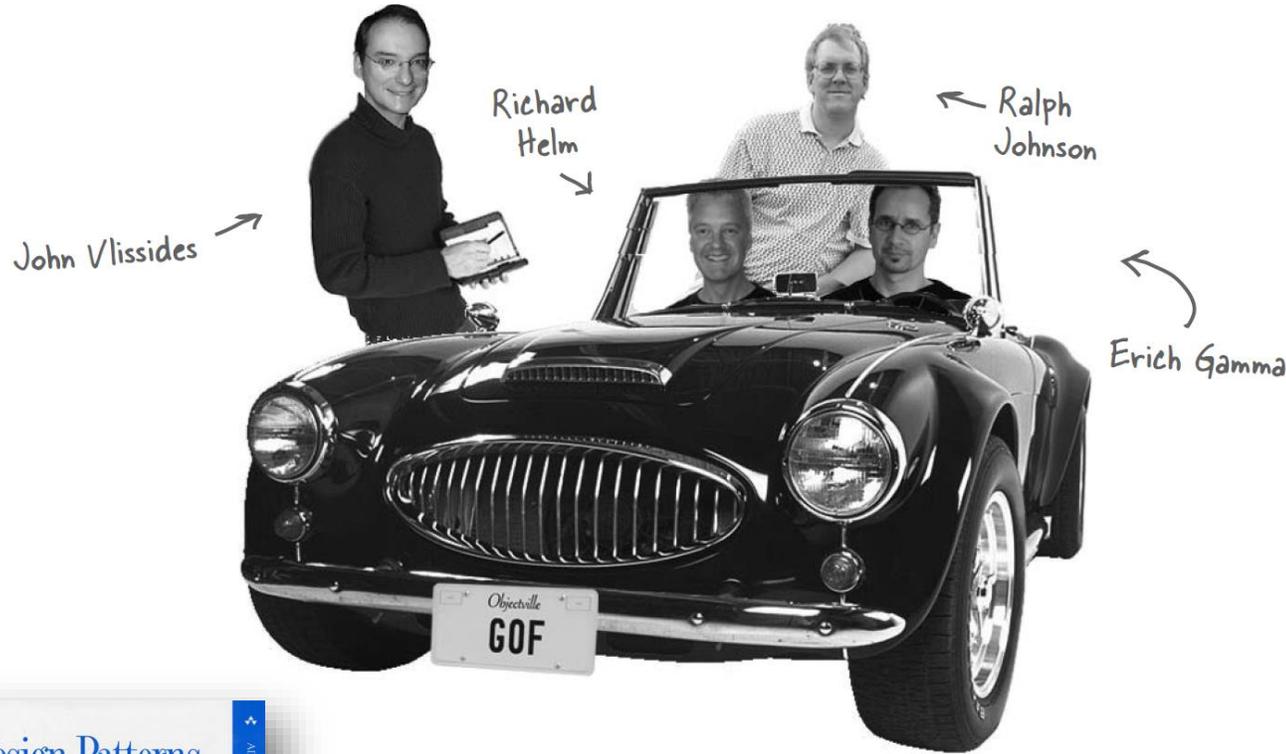 - long-term memory storage requires time on its own

- **Drink** water. Lots of it.
  - your brain works best in wet.
- **Talk** about it. Out loud.
  - speaking on sth helps learning and remembering.
  - helps uncovering hidden ideas.
- **Listen** to your brain.
  - Break when needed.
- **Feel** something.
  - visualize stories of your own even if they suck.
- **Think** about the design.
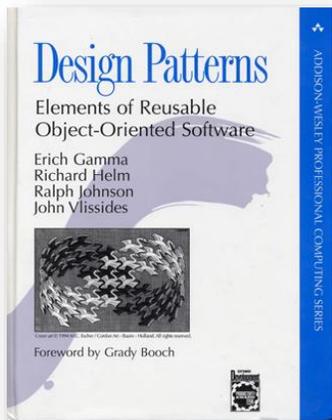 - Think on higher meanings of what you are learning.

- **Design** something!
  - All you need is a pencil and a problem to solve… a problem that might benefit from one or more design patterns.

A few words on patterns

John Vlissides

Richard Helm

Ralph Johnson

Erich Gamma

The authors of Design Patterns are affectionately known as the "Gang of Four" or GoF for short.

Christopher Alexander invented patterns, which inspired applying similar solutions to software.

The Timeless Way of Building
Christopher Alexander

A Pattern Language
Towns · Buildings · Construction