STEVENS
INSTITUTE of TECHNOLOGY
THE INNOVATION UNIVERSITY

CS 443: Database Practicum

Instructor: Iraklis Tsekourakis

Lieb 213

Email: itsekour@stevens.edu

About me

- Prof. Iraklis Tsekourakis
  - Grew up in Kavala, Greece
  - Started programming in BASIC/MS-DOS in my last year of elementary school (1995)
  - Moved to the U.S. 4 years ago for my graduate studies

About me

- Education
  - BS in ECE – Aristotle university of Thessaloniki (2010)
  - MS in CS – Stevens Institute of Technology (2014)
  - PhD in CS – Stevens Institute of Technology (2016)
- Professional Experience
  - Research Associate in CERTH/ITI (Information Technologies Institute) (2011-2012)
    - Software development, Project management, Research

Teaching

- I have been an assistant in courses on
  - Data Structures
  - Algorithms
  - Image Processing
  - Introductory Programming
- I have been an instructor on
  - Image Processing
  - Machine Learning

Research

- Autonomous Software Agents
- 3-D Computer Vision
- Machine Learning

Objectives

- Design and implement relatively complex database systems
  - backend to an application
- Properly document relatively complex database systems
  - Help developers easily understand the structure of the database in order to maintain, enhance, etc., the software

Important Points

- At any point, ask me WHY?
- You can ask me anything about the course in class, during a break, in my office, by email
  - If you think a homework is taking too long or is wrong
  - If you can't understand a specific topic
  - If you think the pace is too fast/slow
  - Etc. etc.

Logistics

- Class webpage: CANVAS
  - https://www.stevens.edu/canvas
- Office hours: Mondays 4-6pm
- and Appointments by email
- CAs office hours: TBA

Resources

- No Textbook
- Slides and more
  - On Canvas

Course Overview

- CS443 is a team project course
  - Please form teams of 4 or 5 class members by next Monday
- The project has to do with students who have trouble putting together study plans by designing – and hopefully, implementing – an initial version of software to do so

Course Syllabus

1. design, and document relational databases (DB) (2 weeks)
2. design and document a relational DB for the backend of the desired software (4 weeks)
3. develop a GUI prototype for the desired software (requirements, analysis and design) (4 weeks)
4. design, and hopefully implement a heuristic that will construct study plans that satisfy the users' needs (remaining time)