

Introduction

Instructor: Vatanak Vong

Resources

- **Reference Material Location**
 - https://github.com/v-vong3/csulb/tree/master/cecs_491

Who am I?

- **Background**

- Graduated with a BS in Computer Science
- Over 9 years developing software for various industries
- Specialize in delivering web solutions

- **Full-time**

- Architect / Lead Engineer for a Fortune 300 company

- **Part-time**

- Freelance Developer
- Computer Science Lecturer

Pop Quiz

Prompt:

Create a file called test.txt that contains the phrase “Hello World”.

Create a file called test2.txt that contains the phrase “Foobar”. Copy the contents of test.txt to a new line at the end of test2.txt.

Answer:

```
echo “Hello World” > test.txt
```

```
echo “Foobar” > test2.txt
```

```
cat test.txt >> test2.txt
```

Food for Thought

How would you describe software engineering?

“Software engineering is a world of tangents”
- Vatanak Vong

Course Objectives

- Overview of modern technologies for delivering web solutions
- Reinforce understanding of SDLC
- Experience an Agile methodology
- Produce a tangible “real-world” system

Practical skills for an impractical world

Class for Career

- The course is meant to provide you insight in a career as a software developer, as such, it is fast-paced.
- Time won't be spent on “syntax”, since they can be easily web searched. Instead, the focus of lectures will be a *layman's* approach on core web concepts and practical applications
- Your effort will directly correlate with how much you can apply topics taught in class to a professional setting
- Homework is always to review all topics discussed in lecture & lab and material for the next class meeting in addition to assignments

Demos?

- **Pre-built demos typically results in a “missing piece to the puzzle” feeling**
- **Most demos will be shown from scratch to show and present ALL steps in the process. It's best to take notes during the demo then practice/ask questions during lab**

App of Substance

- Register
 - Login / Logout
 - Application content (Requirements)
-
- Logging
 - Error Handling
 - Security
 - Data store access
 - UI / UX
 - Documentation

Review SDLC

- What are the phases of the SDLC?
- What techniques are used when designing software?
- What are the methodologies for development?

Project Criteria

- **Registration**
 - **User Management**
 - **Login / Logout**
 - **User Access Control**
 - **Usage Analysis Dashboard**
 - **Logging / Archiving**
 - **Error Handling**
 - **Data store access**
 - **Network communication**
 - **Documentation**
-
- UI / UX
 - Application content (Requirements)

Project Deliverables

- Project Plan
- Test Plan
- BRD
- Design Doc/FRD
- Site Map
- Tech Spec

Recommended Dev Environment

- Windows PC
- Local Admin
- Install
 1. Chrome or Chrome Canary
 2. .NET Framework **4.7.2**
 3. Visual Studio Community
 4. SQL Server 2016 Developer Edition (Database Engine)
 5. SQL Server Management Studio (Database Client)
 6. Local IIS (Microsoft's Web Server)