

# Term Project

hslin, stchang

國立陽明交通大學資工系資訊中心

Computer Center of Department of Computer Science, NYCU

# Outline

- About the term project
- Proposal layout
- Topics
- Possible extensions
- Grading standard

# About the term project

- Work in a group of 3 to 4 people.
- Present your project two times, lecturer and TAs will give you suggestions in the first time and you can improve it in the second time.
  - First presentation: 6/9
  - Second presentation: 6/16
- Choose one from topics for your term project.
- Term project accounts for 15% of the semester grade.
  - You can get up to 5% grade if you do the bonus item.

# Proposal layout

- Requirements Analysis
  - Understand who your user is.
  - List the requirements.
  - Show or describe your solution in the diagram.
  - You can make some assumptions of the requirements.
- System block diagram(s)
- Components description
- Data and/or control flow diagrams
- Reference

# Topic 1: VPN Service

- You are a Solution Architect in a VPN service company.
- There are many services that your company provides:
  - A website for user to register, show the status, update profile, pay the bill, ...
  - A relational database may store these user information.
  - User can connect to this company's VPN service.
  - Users are around the world, and they care about the latency.

# Topic 2: DNS Hosting

- You are a Solution Architect in a DNS hosting service company.
- There are many services that your company provides:
  - A website for user to register, show the status, update profile, pay the bill, ...
  - A relational database may store these user information and DNS records.
  - Provides DNS hosting for users' domain name.
  - Host the DNS around the world.



# Grading standard

- Requirements Analysis
- Functional/Data Architecture
- Engagement
  - e.g., Q&A
- [Bonus] Possible extensions

# Possible extensions

- Backup (and restore) plan
- User management
- Multi-tenant
- Resource limitation
  - disk
  - bandwidth
- BCP (Business Continuity Plan)
  - high availability
  - disaster recovery
- Monitoring and alerting
- Sensitive data management



# Notice

- Focus on “You are a Solution Architect”
  - We don’t focus on software architecture or database schema.
  - We care about these kind of where your firewall are and how you isolates subnets
- There are no “standard answers” in the real world. The relationship between scenario and your design should be logical coherence. For example, “in order to reduce the delay, so I choose to use XXX protocol.”
- Be aware of practical and cost effective