Graduate Team 3's semester project: Model Discovery

CS 5340 Software Maintenance
Semester: Spring 2025
Mid-term Presentation
Team members: John Williams

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Professor: Dr. Armin Moin
Teaching Assistant (TA): Ariful Rabbani

Agenda

- **Project Overview**
- **Software license**
- **Architectural pattern**
- **Work breakdown**
- **Research**
- **Questions and Answers**

Project overview

- **Open-source Project understood by domain experts**
- **Purpose, who is it for?**
  - ➔Software developers who need to control who can use their software
  - ➔Software users who want to use software products controlled by LAMs

Open-source Software License

- The GitHub repository contains a README.md file with important project information.
- https://github.com/colby13king/cs5320-code/blob/master/README.md
- It is also included as part of this package.

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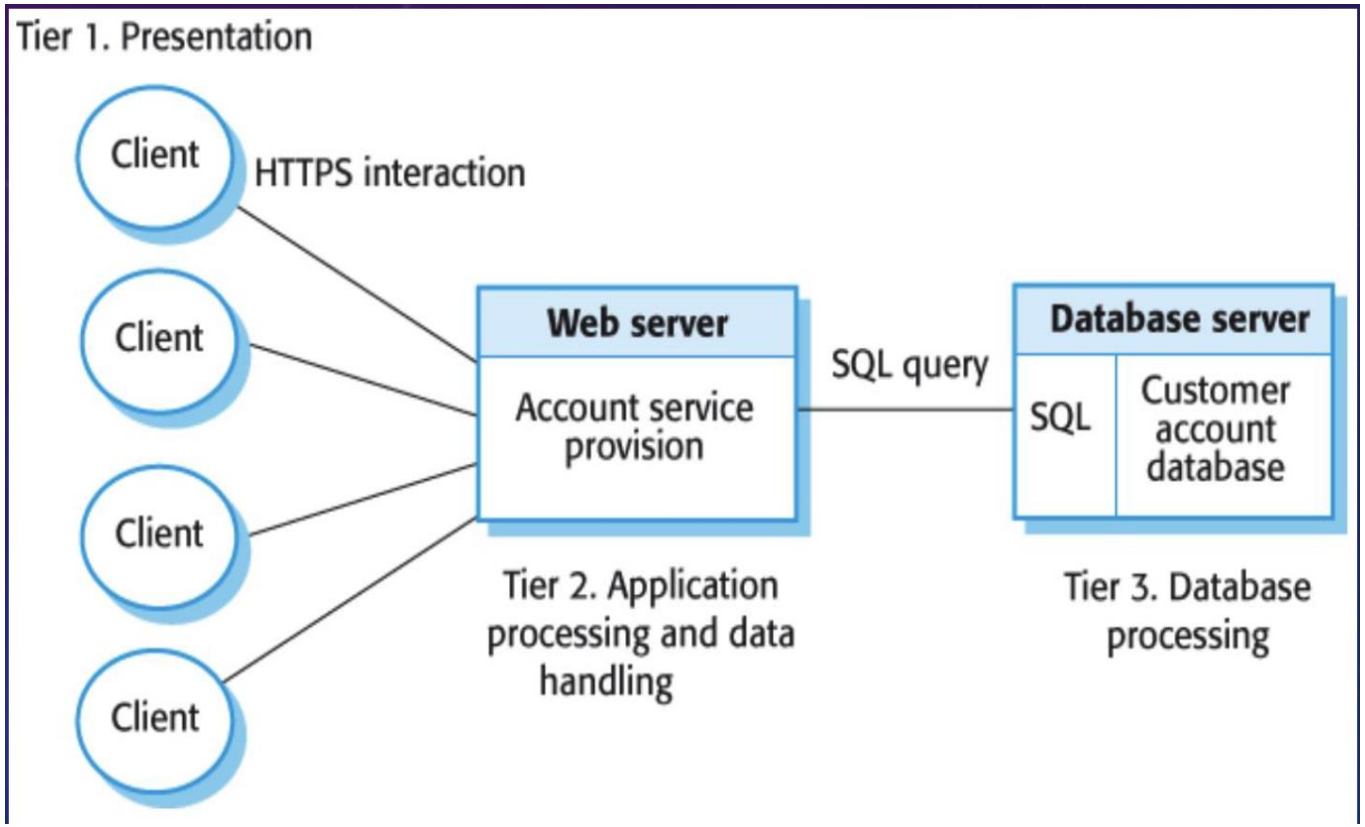
Multi-tier Client Server Architectural Pattern

- **Good for large volume of transactions**
- **Able to scale as more clients sign up for the service it will be better for larger scale**
- **Good for applications where data is volatile**



Work breakdown

ID	Description	Status	Work Breakdown	Completion Date
M-1	Review context and use case diagrams	In Progress	John	03/12/25
M-2	Unit test and document Navigation	Not started	John	3/12/25
M-3	Unit test and document the Cart	Not started	John	3/24/25
M-4	Unit test and document Administration	Not started	John	4/7/25
M-5	Unit test and document Security and Deployment	Not started	John	4/21/25
M-6	Review and close other tickets as time permits	Not started	John	5/7/25

https://uccs-team-cs5320.atlassian.net/jira/software/projects/SCRUM/boards/1

Research

Using tools for model discovery and maintenance

Phase1: Tool Identification

- **Tools that are capable of extracting models from existing source code will be identified.**
- **Some time will be spent learning tool capabilities and limitations.**

Phase2: Tool Testing & Evaluation

- **Tools will be tested and evaluated for efficiency and correctness.**

Phase 3: Gaps will be identified

- **Gaps in tool capabilities will be identified and documented.**

Phase 4: Proposals for Solutions to gaps

- **Novel solutions to fill the gaps identified during testing and evaluation will be proposed.**

Phase 5: Summary

- **The results of the tool testing, evaluation, and gap analysis will be summarized.**

Questions and Answers

Thank You!

John Williams – jwilli11@uccs.edu

University of Colorado
Colorado Springs

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