

COMP-3008 Practical 07

- Study the BASE Astah file
- Answer the following questions
- Follow the submission requirements

Software and System Architectures

- Review the Software Architecture - Implementation in the Astah BASE file
- The banking system is implemented as a layered client/server application

1) Complete the component diagram (located in the Software Architecture folder) to represent the software architecture described below.

2) Create a deployment diagram to represent the system architecture described below.
(Add the diagram to the System Architecture model folder)

Client Tier

- The ClientUX component must be compiled into a **bank.js** file that will be deployed to a number of client computers running ChromeOS

Middle-Tier Server

- The Customers and Accounts components must be compiled into a **bank.jar** file that will be deployed to a Linux Server running Apache Tomcat

Storage-Tier Server

- The **bankStorage.exe** artifact is deployed with dotNET on Windows Server OS
- The **bank.jar** file is also deployed to a Java Runtime Environment (JRE) on Windows Server OS on the Storage Server
- Clients will communicate with the Middle-Tier Server using <<https>>
- The Middle-Tier Server communicates with the Storage-Tier Server using <<SCRAM-SHA-256>>
- Use <<sockets>> for communication between the JRE and the dotNET on Windows Server OS

3) Create a deployment instance diagram for the following location.

Deployment Instance

- The system will be deployed to Thompson, MB
- There will be one HP DL380 storage server (named Caph) that will run Windows Server 2019 with dotNET4 installed
- There will be one HP DL380 (named Procyon) running Ubuntu as the middle-tier
- There will be 4 Google Pixelbooks (named Pixel01, Pixel02, and so on) running the client software

Submission Requirement

1. Arrange each solution diagram and its outer frame for a professional presentation
2. Export each solution diagram as a PNG file
3. Include the Component diagram, Deployment diagram, and Deployment Instance diagram in your submission and present them in that order.
4. Insert the PNG files into the provided Word document TEMPLATE in the same order as the questions
5. Replace **YourName** and **##** in the header of the Word document with your name and section number
6. Save the Word document as a PDF file
7. Submit **only** the **PDF** and **Astah** files to the appropriate dropbox in Learn
8. **DO NOT zip** the files