

CSC 4620
Homework 1
Software Architecture
Due At 5pm on January 31, 2020

iLearn has a link to the book “Visualizing Software Architecture” by Brown that is available for reference. Watch the three software architecture videos available in iLearn and then read the following web page from 2013 describing the Spotify architecture:

<https://labs.spotify.com/2013/03/15/backend-infrastructure-at-spotify/>

(20 Points) Create the C4 **context** and **container** level diagrams for Spotify. Your diagrams must be drawn using an electronic drawing tool (hand drawn diagrams will not be accepted).

Primary Trait	0 points	3 points	7 points	10 points
Context Diagram	Diagram handwritten or not submitted	Diagram missing labels for components and connectors, AND missing context of the software including users and associated systems	Diagram missing labels for components and connectors; issues with the context (missing users or associated systems)	Diagram captures full context of the software system including the users and external systems; diagram appropriately labeled to distinguish between different parts; both components (boxes) and connectors (lines) diagram labeled to indicate purpose and protocols, where appropriate;
Container Diagram	Diagram handwritten or not submitted	Diagram missing labels for components and connectors, AND missing context of the software including users and associated systems; diagram missing some knowledge of the internals of the system	Diagram missing labels for components and connectors; issues with the context (missing users or associated systems); diagram captures the basic knowledge of the internals of the system	Diagram contains the full context from the context diagram; main part of diagram refines the view of the software; both components (boxes) and connectors (lines) diagram labeled to indicate purpose and protocols, where appropriate

(20 Points) Create the C4 *context* and *container* level diagrams for the software for your **team project**. Your diagrams must be drawn using an electronic drawing tool (hand drawn diagrams will not be accepted). **Provide a one paragraph description of the purpose of your project.**

Primary Trait	0 points	3 points	7 points	10 points
Context Diagram	Diagram handwritten or not submitted	Diagram missing labels for components and connectors, AND missing context of the software including users and associated systems	Diagram missing labels for components and connectors; issues with the context (missing users or associated systems); missing description of project	Diagram captures full context of the software system including the users and external systems; diagram appropriately labeled to distinguish between different parts; both components (boxes) and connectors (lines) diagram labeled to indicate purpose and protocols, where appropriate;
Container Diagram	Diagram handwritten or not submitted	Diagram missing labels for components and connectors, AND missing context of the software including users and associated systems; diagram missing some knowledge of the internals of the system	Diagram missing labels for components and connectors; issues with the context (missing users or associated systems); diagram captures the basic knowledge of the internals of the system	Diagram contains the full context from the context diagram; main part of diagram refines the view of the software; both components (boxes) and connectors (lines) diagram labeled to indicate purpose and protocols, where appropriate