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1. A 'Travision Trips' is an e-travel portal to help travelers/tourist a complete travel solution. The company's vision is to provides its customers a platform where they can plan their vacation themselves. It provides its customers a to craft their vacations as per their budget and choices. Their services includes lodging, transportation (that includes car rental services, bus trips, rail, air) and leisure activities. To get the users must logged in with their account and once users are logged in, they provide their choices as well as the budget. The application gives suggest the possible solutions as per choices provided by the user. To provide these services 'Travision Trips' has developed an E-commerce solution 'Travision Easy Access', that provide users an access to all the services via their software. 'Travision Easy Access' have direct accesses to the databases of all the service providers whose services can be accessed via "Travision Trips' web portal. Your task is to draw and labeled an n-tier architecture of 'Travision Trips'. [5Marks]

Presentation	<ul> <li>- Travision Easy Access website interface</li> <li>- log in page, provided choices</li> <li>- Information correctly presented to user</li> </ul>
Logic	- Server of Application
	- Encoding of interface, log in page, budget
	options, location suggestions, etc.
	- processing of information, calculations, and
	logical decisions from Data layer to provide users
	with options to satisfy their needs.
Data	- Sends data and stored procedures to Travision
	Easy Access for processing of information and
	encoding through a network that can be accessed
	by Travision Trips web based portal.

- 2. Structure the airline travel system by supposing that you travel from Toronto to London by air.
  - a. Identify and discuss the series of actions you take in a five layered architecture from the start of your journey at Toronto and then five layered actions at the arrival on destination London. [5 Marks]
  - b. Support your answer by drawing a layered architecture at the starting point of the journey and the destination. Your answer must identify and discuss the action identified both at Toronto and London. [5 Marks]
- A) To go from Toronto to London , the actions would be as follow:

When in Toronto:

i. Entering airport, Purchasing of your ticket

- ii. Check in process and the loading of your luggage
- iii. Going inside the plane
- iv. Taking off of plane
- v. Plane headed towards London airport

## When in London:

- vi. Plane preparing to land
- vii. Plane successfully landing/arriving at airport
- viii. Getting off of plane, checkout process
- ix. Claiming of your luggage and exiting airport
- x. Arriving at your desired destination in London

B)

The figure gives us a framework that allows us to discuss each airline functionality. When we discuss gate/customs functionality at Toronto for example, we know that it is "below" baggage check in, and "above" runway/takeoff. This also applies at London(passenger offload and baggage claim). Each layer in combination with the layers below it, acts to implement some functionality or service, so to say. At the ticketing layer and below, airline-counter-to-airline-counter transfer of a person is accomplished. At the baggage layer and below, baggage-check-to-baggage-claim transfer of a person and bags is accomplished. At the gate layer, departure-gate-to-arrival-gate transfer of a person and bags is accomplished. At the takeoff/landing layer, runway-to-runway transfer of people and their bags is accomplished. Each layer provides its service by (1) performing certain actions within that layer (for example, at the gate layer, loading and unloading people from an airplane) and by (2) using the services of the layer directly below it (for example, in the gate layer, using the runway-to-runway passenger transfer service of the takeoff/landing layer).

- 3. Assume that you are accessing a Seneca website from your home computer (desktop/laptop/tablet).
- a. Identify and discuss the method used at your home to access the Internet and then connection with the Seneca web server. [5 Marks]
- b. Sketch/draw a network connection from your device to the Seneca web server. [5 Marks]
- A) My computer connects to the internet using a wireless router connection. Using a machine unique address called the IP Address, my computer uses the router in my home to connect to the ISP and gain the needed internet connection. I type the Seneca web address into the address bar of my browser. Using the domain name in the URL, the browser searches the DNS to retrieve the corresponding IP address for the Seneca web server. If it finds a match, the browser then initiates a TCP connection to the server using the three-way handshake which is a process where the client and server exchange synchronize and acknowledge messages to establish a connection. Once the connection is established the browser ends an HTTP GET request (formatted at the application layer of the protocol stack) asking for Seneca's web page. The web server receives the request and checks for the desired page, then sends the requested page back as a response if it is found. If the server can't find the requested page, it will send an HTTP 404 error message. The browser then looks for other page elements needed to complete the web page. These usually include images, applets, etc. The static files are cached by the browser so that it doesn't need to fetch them again the next time the page is visited. For each element needed, the browser makes additional connections and HTTP requests to the server for each element. When the browser has finished loading all images, applets, JavaScript files etc. the page will be completely loaded in the browser window and the Seneca webpage will be appearing on my browser.

B)



