**DAILY ASSESSMENT FORMAT**

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| **Date:** | **22/07/2020** | **Name:** | **Varshini MN** |
| **Course:** | **Coursera** | **USN:** | **4AL16EC089** |
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| **Github Repository:** | **varshinimn-test** |  |  |

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| **FORENOON SESSION DETAILS** |
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| **REPORT**  **INTRODUCTION TO DATABASES**  Every organization whether it's a public or a private entity has many different types of data sources, such as distributed databases, Microsoft SQL Server, Oracle, MySQL, SQL light, Postgres, the list goes on and on and on. It's probably the most common database type in the world. Also data warehouses such as Amazon's redshift or Hadoop's Hive or TISA or exit data. Very purpose built environments, and we'll talk a bit about those later founded for Databases Big Data NoSQL. We will cover those in a bit, but those you might be familiar with such as Google's BigTable or Hadoop and MongoDB. File shares. So file shares are everything from Amazon S3, Google Drive, Dropbox, Box.com, even your download folder on your laptop   * That would be a file share, that would be a directory, but we'll cover those in a bit. So one thing every organization has in common is they're all using a lot of data in a variety of combinations of these things * They might be using all or only a couple of these. Also, organizations have many different locations oftentimes regardless of it's a public or private entity, it could be around the city, around the state, around the world * That's true regardless if it's a retail store, bank, a hospital, even a public building, even picking all the different locations, Amazon, and IBM and Google have around the world. One thing in common with all of these different entities, public and private, is they have a lot of Infrastructure and the backend that help them do what they do day in and day out, regardless if it's as simple as providing e-mail for the organization, providing check clients for the organization, even simply all the different projects going on in an organization, the project holders, what they're working on, the way teams integrate together * All the different backend systems being worked on our commonality in all organizations that all of that background infrastructure is stored in data centers. Now, it used to be in the early 2000's people still thought mainly of security as a perimeter defense, and by perimeter defense, I really mean firewalls and VPNs and stopping people from ever getting into your organization * It's been proven time and time again that that's just not adequate anymore if not in the current day and age because regardless of people trying to come into your organization, there's just so many different ways into an organization. You're not just trying to come through your firewall, they're not just trying to come through VPN * They're trying to come with your employees credentials. They're trying to come through your business partners, through other entities that you've worked with that have access into your data center * All of those different means of entering your data center are all potential threat vectors or ways into your organization that you have to think of and lock. Its essentially a safe with many, many different windows and doors that each I will need some security controls around * That's why so much focus has been given in the last 10 years to data security and all of the different bridges that you hear again and again and again, where all somebody compromising an organizations data security controls, or simply accessing it because of lack of controls access to the data.   **DATA SOURCE TYPES**   * Distributed database * Data warehouse * Big data * File shares   **DATA MODEL TYPES**  The three can be considered to exist on a continuum, with unstructured data being the least formatted and structured data being the most formatted. Another way to say that would be to say that, they exists on a continuum and structured data is the easiest to understand and most organized, and unstructured data would be the least organized and hardest to understand and find what you're looking for   * **Semi-structured data** is the difference between structured data and unstructured data is unstructured data has not been organized into a format that makes it easier access and process * **Structured data** is data that has not been organized into a specialized repository such as a database, but that nevertheless is associated information such as metadata, that makes it more amenable to processing them raw data. Structured data is basically the opposite of unstructured. It has been reformatted and its elements organized into a daily structure so that elements can be addressed, organized, and accessed into various combinations to make better use of the information. However, structured data can turn to unstructured data. If I was to take structured data from a bunch of different databases and throw it into a new location and all of those different pieces of structured data from those different databases, if I don't take the time to reformat it and organize it into a data structure so that I can understand what all of the different databases were doing, and the different commonalities such as customers, clients, products, etcetera, then it becomes much harder for me to understand what data is in the database and to look for commonalities and really understand the data. * **Unstructured data** is information in many different forms that doesn't hew to conventional data models and thus typically isn't a good fit for mainstream relational databases. One of the most common types of unstructured data is simply text. Unstructured text is generated and collected in a wide range of forms including Word documents, email messages, text messages, PowerPoints, survey responses, transcripts, call center interactions, post from blogs, social media sites, on and on. Other types of unstructured data include images, audio and video files. Even though all of those different types of data are very different, they would all be classified as unstructured data.   **SECURING DATA SOURCES BY TYPE**  We talked about VPNs. One of the big things to take into account though is, it's not simply your users and your employees connecting to your data sources and your data centers. It's also your business partners and other entities that you do business with oftentimes have direct access into your data centers and interior dip various data sources   * So the controls that are put in place and need to be put in place for each of these things really needs to be thought of and taken into account based on how your organization leverages those data sources to a new environment. Like my example of the bar gold and car keys, different data requires different levels of controls and different hardening of the operating system databases that sits inside * But also you might think of not only monitoring but also encrypting or tokenizing your data and encryption rest, encryption motion is just the list goes on and on and on for different ways that you could secure your data. Additionally, you're talking about all these different data centers and different data types and all these different applications that are running on those different data types * The one thing we haven't talked about yet is where the data sources are actually being hosted. So this one right here on premises is what most people think of as their organizations data centers. So data center you operate and have full control over everything happening inside. So in a data center, it doesn't matter if you're thinking of the application, the data itself, runtime environment such as the Java Runtime, middleware software is supporting all of that. Above it, the operating system is sitting on. You have the ability to touch and work with any of it * Even including the virtualization the operating system maybe running inside, networking of that server, storage of the server, and just the servers themselves. Like everything top to bottom you have complete access to update, change, reconfigure, however you see fit. Infrastructure as a Service and the rest of these are known as cloud services defined in your cloud as infrastructure service, platform as a service, software as a service * Oftentimes you'll see these written as IaaS, PaaS, and SaaS or SaaS, PaaS and infrastructure service. Infrastructure as a service, what organizations will do is, they will have the servers likely owned and ran and updated by other organizations such as a cloud provider like IBM, Google, Amazon et cetera. |

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| **Date:** | **22/07/2020** | **Name:** | **Varshini MN** | |
| **Course:** | **Salesforce** | **USN:** | **4AL16EC089** | |
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| **AFTERNOON SESSION DETAILS**    **s2.PNG** | | | |
| **REPORT**  **Discover Use Cases for the Platform**  **Learning Objectives**   * After completing this unit, you’ll be able to: * Describe sample use cases for the platform. * Discover reasons for using the platform across multiple departments.   **High Impact, Low Effort**   * The platform helps you move fast. Part of that speed comes from replacing tasks you’re used to doing by hand with more streamlined processes. So let’s pause for a moment to talk about some ways the Salesforce platform can accelerate your business. * When you’re learning to build on the platform, the first things you want to tackle are projects that have big impact but are easy to implement. While that sounds idealistic, the platform gives you lots of opportunities to make big changes with minimal effort * Let’s think about an example from DreamHouse. Michelle and her fellow brokers often use email to discuss particular properties. Sometimes, Michelle participates in multiple threads discussing the same property and that can get confusing. Between all the emails, details get lost. And when brokers overlook a detail, they can miss out on a sale or make a mistake that impacts the buyer.   **By creating a single custom object, you can totally change how your organization collaborates. High impact, low effort. As you start building with the platform, keep your eye out for processes with:**   * Heavy email collaboration * Reliance on spreadsheets * Shared local documents * Time-intensive, repetitive manual steps * Impact on only a few departments (you want to minimize the number of stakeholders while you’re still learning)   Processes with these traits are great candidates for early projects on the Salesforce platform.  **Other Uses for the Platform**  In our DreamHouse story, we’re using Salesforce to help real estate agents sell houses better. But you can customize the platform to aid in a lot of other business tasks, and not just for the Sales department. Let’s take a look at a couple other ways you can build on Salesforce.  **HR Can Use the Platform**  Julian, who works in the DreamHouse HR department, is in crisis. He has hundreds of applications coming in for dozens of job openings. Once applicants are hired, Julian has to set up training and submit hardware requests. All this activity creates a lot of data, and Julian is struggling to manage it all.  Using the Salesforce platform, D’Angelo can create a custom app that helps DreamHouse’s HR employees streamline and automate the hiring and onboarding process. Here are some things the custom app can do.   * List job openings. * Store applicants for each job opening. * Send automated reminders to hiring managers. * Store orientation and training plans. * Manage equipment orders. * Track employee time off.   Like any app built on the platform, the HR app D’Angelo creates is available for the Salesforce mobile app. That way, HR reps can manage applicants and new hires whether reps are in the office or off at a recruiting fair. Cool!  **IT Can Use the Platform**  Over in IT, Regina is also feeling the burn. She’s getting a million IT tickets coming in every minute and everyone’s problems seem to be urgent. Who could she possibly ask for help with this torrent of tickets  When you build your IT ticketing system in the same place as your CRM, you get a lot of benefits. All your users and their information are already there. You can track cases per user and promote collaboration between IT and employees. Here are some other ways to streamline IT using the Salesforce platform:   * Create reports and dashboard to aggregate and analyze requests. * Send confirmation emails when requests are received, completed, or updated. * Queue incoming requests. * Create custom forms for employee requests and create a knowledge base for common issues. * Track employee hardware assets.   With a streamlined IT process, users are happier and IT has more time to build infrastructure rather than maintain a separate system. | | | |