DAILY ASSESSMENT FORMAT

Date:	14/07/2020	Name:	Nichenametla Bhargavi
Course:	Mathematics for Machine Learning: Linear Algebra	USN:	4AL17EC061
Topic:	Week 2: Vectors	Semester & Section:	6th Sem A sec
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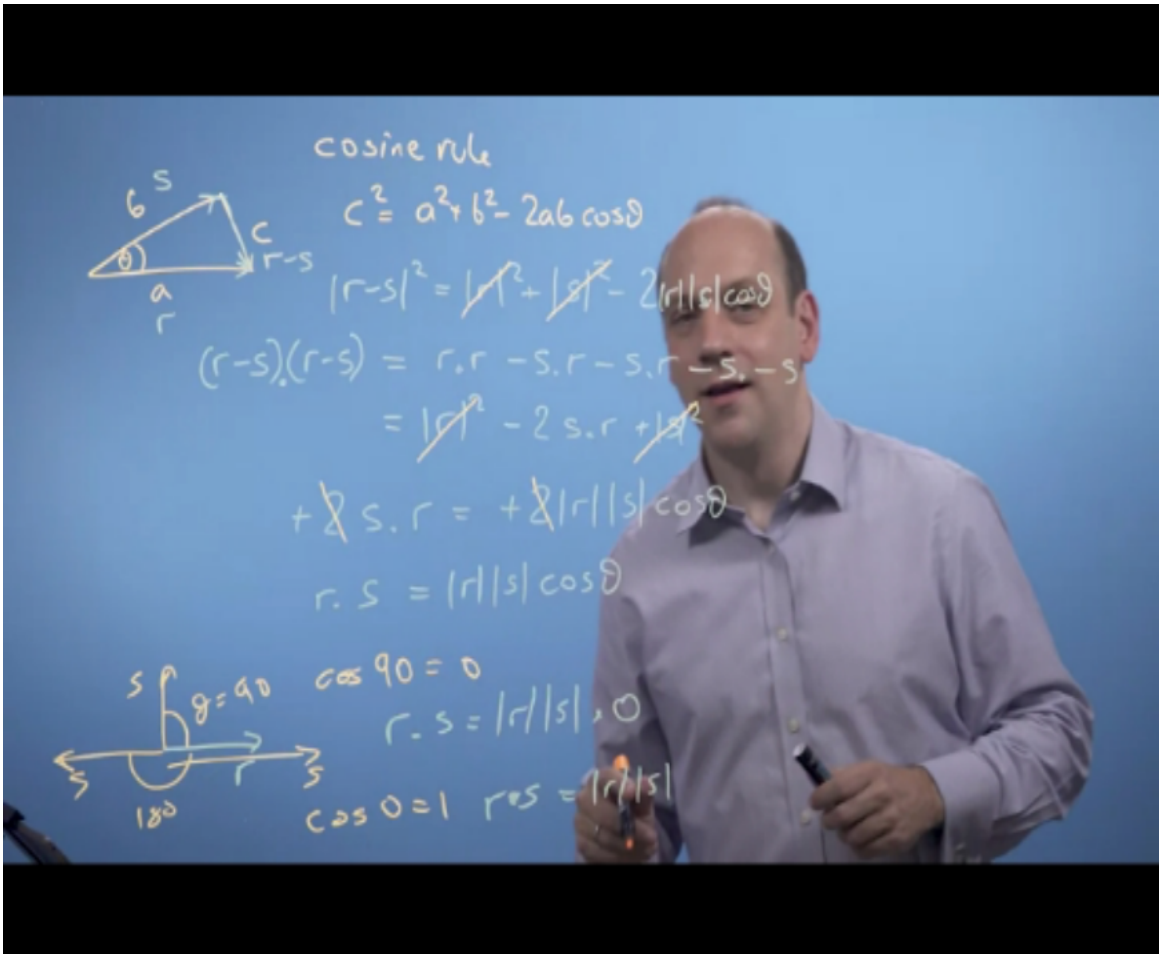
FORENOON SESSION DETAILS
Image of session



Report- Report can be typed or handwritten upto one or two pages.

Modulus & inner product:

* The dot product may be defined algebraically or geometrically. The geometric definition is based on the notions of angle and distance (magnitude of vectors).

* The equivalence of these two definitions relies on having a Cartesian coordinate system for Euclidean space.

* In such a presentation, the notions of length and angles are defined by means of the dot product. The length of a vector is defined as the square root of the dot product of the vector by itself, and the cosine of the (nonoriented) angle of two vectors of length one is defined as their dot product.

* So the equivalence of the two definitions of the dot product is a part of the equivalence of the classical and the modern formulations of Euclidean geometry.

* The distance is covered along one axis or in the direction of force and there is no need of perpendicular axis or sin theta. In cross product the angle between must be greater than 0 and less than 180 degree it is max at 90degree. That's why we use costheta for dot product and sin theta for cross product.

Cosine & dot product:

* The extent to which the two vectors go in the same direction, because if theta was 0 then cos theta would be 1, and r.s would just be the size of the two vectors multiplied together.

* If the two vectors on the other hand we're at 90 degrees to each other, if they were, r was like this and s was like this and the angle between them, theta, was equal to 90 degrees, cos theta, cos 90 is 0, and then r.s is going to be, we can immediately see, r.s is going to be some size of r, some size of s, times 0.

* If the two vectors are pointing at 90 degrees to each other, if they what's called orthogonal to each other, then the dot product it's going to give me 0.

Projection:

* Take a little right-handed triangle, drop a little right-handed triangle down here where this angle's 90 degrees, then I can do the following.

* If we can say that if this angle here is theta, but cos theta is equal to, from sohcahtoa, is equal to the adjacent length here over the hypotenuse, that is, and this hypotenuse is the size of S.

* If I compare that to the definition of the dot product, I can say that R dotted with, we'll have fun with colors, dotted with S is equal to mode R size of R, times the size of S, times cos theta.

* But the size of S times cos theta if i put S up here, just need to put my theta in there, cos S,

cos theta is just the adjacent side, so that's just the adjacent site here in the triangle. So, the adjacent side here is just kind of the shadow, if I if I had a light coming down from here, it's the shadow of S on R.

Operations we can do with vectors:

* Finding the modulus (size), angle between vectors (dot or inner product) and projections of one vector onto another.

* We can then examine how the entries describing a vector will depend on what vectors we use to define the axes - the basis.

* That will then let us determine whether a proposed set of basis vectors are what's called 'linearly independent.'

* This will complete our examination of vectors, allowing us to move on to matrices in module 3 and then start to solve linear algebra problems.

Summary:

* We've looked at vectors as being objects that describe where we are in space which could be a physical space, a space of data, or a parameter space of the parameters of a function. It doesn't really matter.

* It's just some space.

* Then we've defined vector addition and scaling a vector by a number, making it bigger or reversing its direction.

* Then we've gone on to find the magnitude or modulus of a vector, and the dot scalar and vector projection product.

* We've defined the basis of a vector space, its dimension, and the ideas of linear independence and linear combinations.

Key Concepts:

Calculate basic operations (dot product, modulus, negation) on vectors

Calculate a change of basis

Recall linear independence

Identify a linearly independent basis and relate this to the dimensionality of the space.

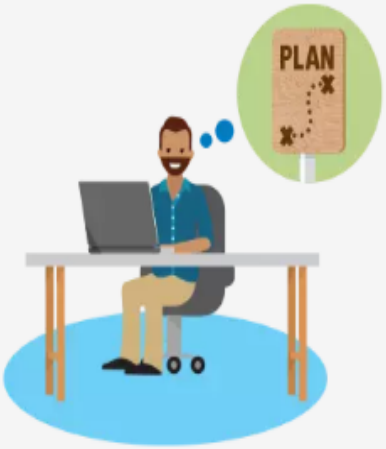
Date:	**14/07/2020**	**Name:**	**Nichenametla Bhargavi**
Course:	Trailblazer	**USN:**	**4AL17EC061**
Topic:	Salesforce	**Semester & Section:**	**6th Sem A sec**

AFTERNOON SESSION DETAILS

Image of the session

Creating your action plan

Now that you've identified one or two target roles that you're interested in pursuing, it's time to make a concrete action plan for what you need to do to prepare for that role.



There are three main areas to consider in developing your career plan.

1. **Learning:** what are the skills you need to acquire, and where can you learn them?
2. **Earning:** what credentials do you need for this role and how can you demonstrate your skills to employers?
3. **Connecting:** what are ways to connect and network with others in the field?

Report:

Creating your action plan:

Now that you've identified one or two target roles that you're interested in pursuing, it's time to make a concrete action plan for what you need to do to prepare for that role.

Developing your career plan.

There are three main areas to consider in developing your career plan.

Learning: what are the skills you need to acquire, and where can you learn them?

Earning: what credentials do you need for this role and how can you demonstrate your skills to employers?

Connecting: what are ways to connect and network with others in the field?

Learning:

For most skills and roles, you can find many options for learning—from self-paced online learning to instructor-led classes, events, and even formal degree programs.

What type of learning you choose to do depends on your time, learning style, and budget. Sometimes what works best for you is a combination of different learning programs. There's no one right way. It's up to you to choose the adventure that works best for you.

Learn Online:

One of the best ways to skill up for Salesforce career paths is through Trailhead—the fun, free, hands-on way learn. If you're new to Trailhead, here are a few recommendations on where to start.

Check out a few resources to get you started.

* Trailhead Collaboration Group on the Trailblazer Community

* Salesforce User Groups

* Salesforce Developer Meetups

* Featured Online Collaboration Groups

For developers, there are some additional resources and ways to connect to the thriving community of more than 3 million Salesforce developers.

* The Salesforce developers discussion forums are an important resource to get answers to your questions. It's not uncommon for project managers, developers, and other R&D staff to contribute.

* On the Salesforce StackExchange, get expert guidance from an active developer community featuring some of the most prominent developers from across the globe.

* Using the #askforce hashtag on Twitter immediately connects you to hundreds of Salesforce administrators and developers. The answer to your 280-character questions is sometimes only a few seconds away!

Attend a Local Event:

Can't get to Dreamforce? Attend an event the next time we roll into your hometown. These events give you the chance to attend great keynotes, learn firsthand from leading customers how to be successful with Salesforce, and get up close and personal with our entire suite of products. You can also find Salesforce User Groups in cities around the world that meet regularly to network and learn.

Here are a few resources for finding in-person events.

Salesforce User Groups: User groups are customer-organized groups that meet online and in-person. Join one today to network, share ideas, and get tips on how to get the most out of Salesforce.

Salesforce Developer Groups: For person-to-person interaction, join a local Developer Group. There are more than 160 groups around the world, and more are springing up all the time.

Salesforce Meetups: Find independent local events to meet Salesforce users, administrators, and developers in your area. Swap business cards and develop a support network of Salesforce professionals.

Community Events: Join the community of Customer Trailblazers at an event near you.

Keep an eye out for the Salesforce Developer Events and Salesforce Admin Events in a city near you as well.

Find a Mentor:

Finding and working with a mentor can be another great step to building your career. Mentors can help you identify skills to make that next step or provide valuable feedback. Or consider building your leadership skills by becoming a mentor yourself.

In either case, the Mentorship Central group on the Trailblazer Community helps pair up mentors and mentees and can be a good starting point.

Here are few ways to find a volunteer opportunity:

* VolunteerMatch.org: Search for Salesforce administrator or developer volunteer opportunities by location and cause. Or find marketing and fundraising opportunities.

* LinkedIn for Volunteers: The LinkedIn Volunteer Marketplace connects professionals to nonprofit volunteer opportunities.

Get Involved in the Community:

Blogging, helping on forums, and speaking at events are more great ways to build your reputation and expertise and take your career to the next level. See the Public Speaking Skills module for tips.

For Salesforce developers or aspiring developers, hackathons and challenges are another way to build your resume. Check the Salesforce Developers home page frequently, to find new challenges, hackathons, and other opportunities to show your skills.

Create Your Plan:

Now that you know a little bit more about the resources that are available to support your career development, it's time to set some specific objectives and commit them to paper.

The format for this plan is similar to the one that Salesforce uses for goal planning called the V2MOM. For more in-depth information about the V2MOM see the Organizational Alignment (V2MOM) module .