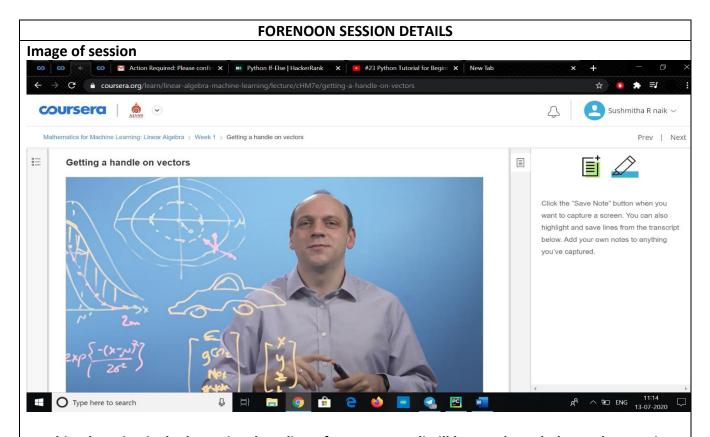
# **DAILY ASSESSMENT FORMAT**

Date:	13 <sup>th</sup> July 2020	Name:	K B KUSHI
Course:	coursera	USN:	4AL17EC107
Topic:	<ul><li>Mathematics for machine learning: Linear Algebra</li><li>Ames revision class</li></ul>	Semester & Section:	6 <sup>th</sup> sem 'B' sec
GitHub	KUSHI-COURSES		
Repository:			



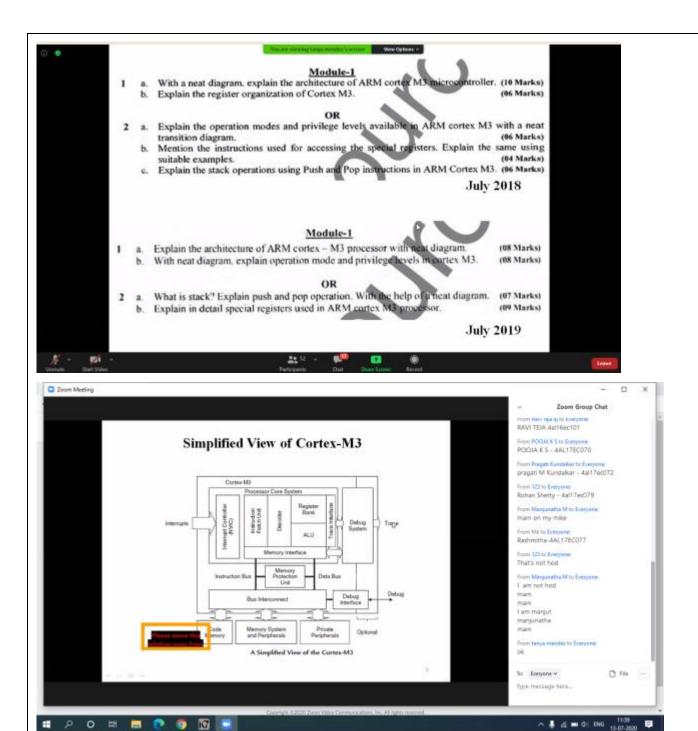
Machine learning is the latest in a long line of attempts to distill human knowledge and reasoning into a form that is suitable for constructing machines and engineering automated systems. As machine learning becomes more ubiquitous and its software packages become easier to use, it is natural and desirable that the low-level technical details are abstracted away and hidden from the practitioner. However, this brings with it the danger that a practitioner becomes unaware of the design decisions and, hence, the limits of machine learning algorithms. The enthusiastic practitioner who is interested to learn more about the magic behind successful machine learning algorithms currently faces a daunting set of pre-requisite knowledge: Programming languages and data analysis tools Large-scale computation and the associated frameworks Mathematics and statistics and how machine learning builds on it At universities, introductory courses on machine learning tend to spend early parts of the course covering some of these pre-requisites. For historical reasons, courses in machine learning tend to be taught in the computer science department, where students are often trained in the first two areas of knowledge, but not so

much in mathematics and statistics. Current machine learning textbooks primarily focus on machine learning algorithms and methodologies and assume that the reader is competent in mathematics and statistics. Therefore, these books only spend one or two chapters of background mathematics, either at the beginning of the book or as appendices. We have found many people who want to delve into the foundations of basic machine learning methods who struggle with the mathematical knowledge required to read a machine learning textbook. Having taught undergraduate and graduate courses at universities, we find that the gap between high school mathematics and the mathematics level required to read a standard machine learning textbook is too big for many people. This book brings the mathematical foundations of basic machine learning concepts to the fore and collects the information in a single place so that this skills gap is narrowed or even closed.

Linear algebra is a sub-field of mathematics concerned with vectors, matrices, and linear transforms. It is a key foundation to the field of machine learning, from notations used to describe the operation of algorithms to the implementation of algorithms in code. In this course on Linear Algebra we look at what linear algebra is and how it relates to vectors and matrices. Then we look through what vectors and matrices are and how to work with them, including the knotty problem of eigenvalues and eigenvectors, and how to use these to solve problems. Finally we look at how to use these to do fun things with datasets - like how to rotate images of faces and how to extract eigenvectors to look at how the Pagerank algorithm works.

Since we're aiming at data-driven applications, we'll be implementing some of these ideas in code, not just on pencil and paper. Towards the end of the course, you'll write code blocks and encounter Jupyter notebooks in Python, but don't worry, these will be quite short, focussed on the concepts, and will guide you through if you've not coded before. At the end of this course you will have an intuitive understanding of vectors and matrices that will help you bridge the gap into linear algebra problems, and how to apply these concepts to machine learning.

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#### Simplified view of cortex M3:

- Hardward architecture
- 32 bit architecture
- NVIC
- Memory protection unit
- R0-R12: general purpose register
- R13:stack pointer
- Program counter is used to hold the next instruction to be executed

- Special registers:
  - 1.program status registers
  - 2.interupt mask registers
  - 3.control status register

#### **Feature of NVIC:**

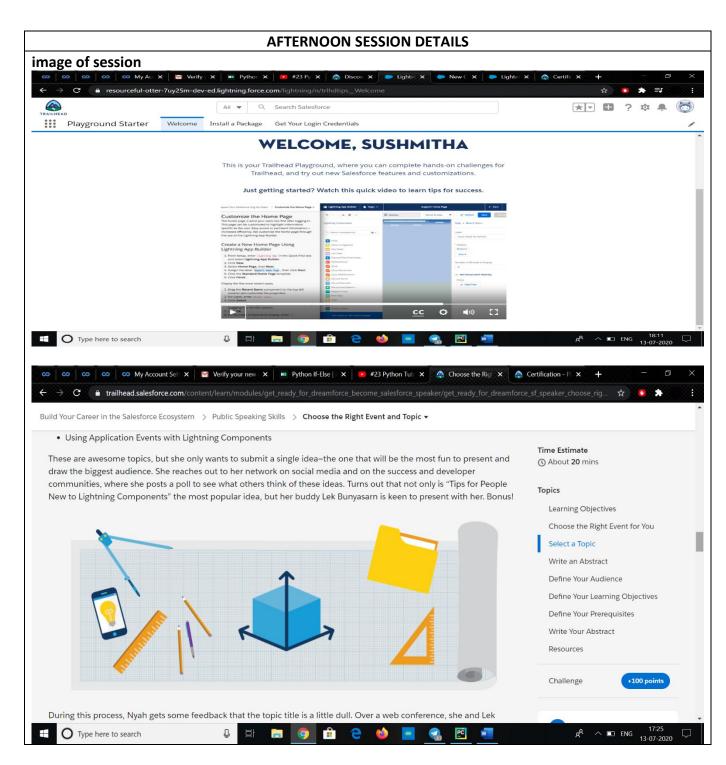
- 1. Nested interupt support
- 2. Vectored interupt support
- 3. Dynamic priority changes support
- 4. Reduction of interupt latency
- 5. Interupt masking

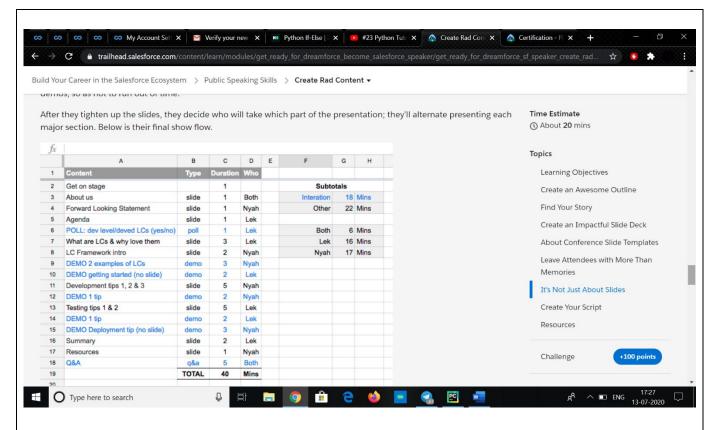
## **Application:**

- 1. Consumer product
- 2. Automative parts
- 3. Real time system
- 4. Data communication
- 5. Industrial control

# **DAILY ASSESSMENT FORMAT**

Date:	13 <sup>th</sup> July 2020	Name:	K B KUSHI
Course:	Salesforce	USN:	4AL17EC107
Topic:	build-your-career-with-salesforce-	Semester	6 <sup>th</sup> sem 'B' sec
	skills	& Section:	
GitHub	KUSHI-COURSES		
Repository:			





#### Report:

#### **Assess Yourself**

### **Learning Objectives**

#### After completing this unit, you'll be able to:

- List the steps for creating a career plan.
- Identify your unique strengths, skills, and talents and what's important to you.
- Describe the different elements of self-assessment.

#### A Quick Introduction to Career Development

Whether you're just starting out in your career or already have a few years of experience under your belt, it can be helpful to step back and think about your career plan. Career planning is not a one-time event; it's an ongoing process to revisit throughout your career as your priorities and interests shift and change.

#### **Get to Know Yourself**

The first step in managing your career is to get a clear picture of who you are and what you want.

#### This includes:

- Knowing what motivates you and what matters in your life
- Identifying your strengths and opportunities to improve

Finding out what you're most interested in What we want can change over time—our priorities change, we can discover new interests or skills that we want to develop and learn. This is an opportunity to check in and see where you are today. **Land Your Next Opportunity Learning Objectives** After completing this unit, you'll be able to: Prepare for interviewing by creating your elevator pitch. • Create your Salesforce resume and profile. Connect with employers. Now You are Ready! Now that you know where you're headed and you've created your plan to get there, it's time to go out and land that next role. We've created a job seeker checklist, included in the Resources pack you downloaded, to help you make sure your personal presence is amazing both in person and online.