00:00:02 okay great so uh in previous offerings there was one evaluation component creating meme for each class so this is one of the meme someone submitted for first class that they have to work hard for this course and there are so many topics they have to cover as part of this course we'll go through them so class timings are clear Saturday 2 to 3 Tuesday 6: to 7:30 evening and all our classes uh quizzes will happen on Saturday because they are working professionals uh they may not find time suitable on Tuesday for quiz so we'll

00:00:56 conduct our all quizzes on Saturday uh this is a course content we will start with cloud computing different deployment models then uh we'll look into the technological aspect of cloud computing which is known as virtualization uh you will be uh doing quite a lot handson with virtualization uh many of you might be also breaking your systems uh your laptops and then uh we'll move to to Virtual and uh physical networks storage virtualization they are very small topics then again we'll come back to

00:01:37 Virtual Machine management which is again uh significant uh larger topic then uh latest one in virtualization space is containers Dockers you might have heard about Dockers so I'll cover Dockers and then there will be some case studies if time permits any doubt any question anything you would like to add we have 20% flexibility we can remove some topic and add another topic as part of this course so may not be right now but you go back uh if you find that something should be covered as part of this course which can help you in

00:02:21 better job opportunity you can let me know we add it uh sir just one thing uh maybe if it is possible to add up to this course content to that the case study just now which you have mentioned I think uh like if there's a case study Associated to each and every uh topic let's say cloud computing or when we are going by the virtualization we have only 42 lecture my means 42 hours okay so maybe like I don't mind adding anyway so for executives anyway there's a case study component for evaluation we

00:02:56 come to that for you anyway there will be case study okay uh which uh you yourself will be doing I will be sharing uh virtual box uh workbook which we created as part of our earlier offering that will definitely help in picking up the virtualization concept and that will cover networking part also storage part also okay sir right yeah okay you have to speak because yeah hello yes uh good afternoon sir uh my name is H uh just one more thing in case it can be included is either of uh the prime Cloud offer like

00:03:48 vendors like either AWS or gcp or Azure if we can cover just one of them uh for like in like deployment or production perspective let's say either the Lambda functions or I mean which whichever can help us to understand the deployment part so uh uh as part of course uh I might not be uh you know covering any any uh what we say uh patented technology or private technology so I cannot en encourage uh AWS or gcp as part of my lectures but what we will be doing is most probably we'll be getting uh Google Cloud platform

00:04:40 credits uh those who have done my earlier courses they have got some $50 credits so for this course also we may get $50 credit for each every one of you and there will be one assignment you uh need to do with those uh those credits so in at as part of that process you will get some handson experience on gcp but the concepts which we will be covering that will be applicable across different Cloud platforms azur Amazon AWS or Google cloud or IBM Cloud okay sir thank you so much so uh there's a course evaluation

00:05:29 policy uh this time I'm considering executive and regular different until I was not doing that uh the reason is your seniors so uh in open book exam they were doing chat and using GPD and they got caught and then they were giving some you know uh warning that they will go for suicide I don't want you to go for site so that's why I uh done you know separate com uh evaluation policy uh so the reason I was keeping open book because uh in person people have complained that online people have some advantage of doing uh additional

00:06:20 stuff uh but if there are evaluation or separate their question paper is separate so there for executives question paper will be bit tough as compared to in person in physical mode but in physical mode your paper will be close book exam online people may refer content again plagarism is not allowed and I have shared one small par for what is plagarism any content which will help you in getting more marks than you deserve that act is known as plagerism for example uh for regular candidates attendance is 10%

00:07:04 marks so someone marking proxy that is PLM act for this course fine are we have we rolled out the attendance sheet please roll out okay so uh this 10% for executive is case study component so they have to do additional case study because they might not be attending classes all the time they might be looking at recordings but then they have to put additional effort for doing case study all other components are same the only difference is in their midterm and final exam they will get SE different question paper as compared to

00:07:48 you your question paper will be uh in principle uh assuming that it's a close book exam their uh question paper will be considering it's an open book exam and in my previous courses offerings in my Close book exam average score is uh about 65 or so in open book exam uh average score is around 50 or less than 50 so in General open book exams are tougher because they uh they ask uh they focus on your think pattern you have to spend lots of time and we easily get to know if you have used chat GPT because

00:08:37 people have similar answer in chat GPT for same question and our mind cannot work that like okay any doubt any question paper uh question so far uh is it attendance is not mandatory for the executive St sir but watching videos is mandatory I will look at how many views are there for each of my video I not commercialize my videos I not say share like or subscribe but okay do watch those videos yeah yeah sure but attendance is not compulsory for us right yeah not compulsory but uh quiz will be announced quiz there will not be

00:09:18 any surprise quiz uh so you have to you have to be there for quizzes yes quizzes are those who have attended my previous classes they know slido so it will be like ABC uh audience poll like quiz and you will get only 30 seconds to answer a particular question we'll have a dummy Quiz today itself that will not be counted towards your grading so uh and quiz will be announced so I will create a schedule and announce well in advance so if there's any marriage happening in your home or in your neighbor's

00:10:07 home ask them to find a different Murat as compared with you know relative to your quiz schedule so don't miss your quizzes because there will not be any makeup quiz and for technical glitches uh only 80% of questions will be considered for your mark working so for example in four quizzes there are four quizzes each quiz is carrying say 25 questions so total 100 questions so the score will be out of 80 so if someone has a scored 85 their score will be 80 if someone has a scor 79 there is score will be 79 out of

00:10:51 80 So 20% relaxation is there because of your technical glitch your laptop glitch your mobile glitch your network whatever or if you even you can Mark wrong answer for them also that is also fine so only 80% quiz uh portion will be considered for your marks any doubt regarding quiz component so schedule will be shared well in advance with all of you regarding when we are planning quiz there might be some delay but that will be announced in the class at least one week in advance so that you can adjust

00:11:33 if there's any urgency so there will be three assignments the total weight weight is uh is 10% and each assignment will will carry equal weightage right and then there will be project or research paper implementation uh project uh I will not be sharing ideas don't ask me for ideas I cannot have you know 258 259 ideas 259 candidates registered for this course so that will be in group of two so even I cannot have 125 ideas myself so for project and research paper implementation you have to come up with

00:12:20 your own project and research paper which you want to implement share with us our team will be happy to give you feedback so uh in project uh you will be implementing uh something doing some experiment showing some results and in research paper you will be picking up one research paper from good conference or good Journal preferably cor a ranking conference and q1 journal and you will be implementing that paper and at least getting the equivalent result if you feel so you can improve the results and publish your own paper

00:13:01 that is bonus so that's the project and research paper implementation component and then midterm exam and final exam midterm exam is for 2 hours final is for 3 hours any doubt any question all clear again I'm saying pler M I have awarded F in just previous offering and software and data engineering only for plagarism that candidate also contacted me afterward but result was not changed so please maintain academic Integrity it's better to score B B minus c as compared to getting F because one cheating f for complete

00:13:58 course and don't uh give me the reason that someone died at your home so and there was assignment deadline so you thought you will also die in this course no that should not be the reason that was the reason given by that candidate but plagarism is not the way to you know you you should mail us if there's any urgency at your home we understand we will cooperate but don't do this kind of act which force us to take a stronger step against you right our team is uh I our team has done lots of HSS courses so they are very amicable

00:14:44 to approach and if they are not amicable to approach for you you drop me an email keeping them in CC you can safely complain about them right so nothing to worry so okay uh I'll introduce the TS one is missing right so Sita manik and Satish and one more is there arpit Mahajan so if you have any technical query you should approach manik Satish or arpit non-technical query you can approach Sita s okay if you have any medical approach you can approach Sita medical issue you can approach Sita so she is

00:15:29 Yoga expert she can help in getting out of depression easily or obesity we can't treat infobesity you have to deal with infobesity you know infobesity information obesity we'll find lots of rumors for class also we can't prevent that we don't have any expert who deals with infobesity whatever is announced on the classroom that should be considered final and the latest announcement should be overwriting the older announcements right so keep checking your inbox your classroom for latest announcements any other doubt or

00:16:14 question sir one question that project need to be done by own or there we can make a group or so group of two okay not more than two again those people who have done course with me they know why not group bigger than two third person will be uh playing the role of supporting actor and fourth will become producer present the results and get all the credits so only group of Two And clearly mention your project report who has contributed what any other doubt question all good great okay so uh you can move to

00:17:09 slido.com and New Generation can scan the QR code the older generation can type this code 3359 785 on slider.com I okay so I can see on in online we have more uh around 78 people and offline also I can consider safely 70 people so far only 108 has answered so all of you please quickly do it offline everybody's done anybody is still doing okay so move on so uh people who have said yes uh you have to be more careful uh because uh uh the expectation is high from people who are saying yes so they already know so they will be

00:19:35 doing some advanced stuff don't change your answer now anyway it was Anonymous one so I don't know who has said yes or no okay no you can keep it yes I don't know who has answered who has you have not entered your name so far right so you are safe okay let's go to next one this you can be uh you know um fear U what we say honest with yourself again I am not collecting your name so it's fine if you Mark 10 or one doesn't matter just I want to have an idea how what is the average skill set of the

00:20:51 class lower the average means your assignment has to be hard so that you learn right so that's the message I will get it's my responsibility to make you learn okay so Sati assignment level has to be go up by one last time the average score was around 6.5 something now it's 3.9 we have to create our assignments bit tougher uh 4% people who are at 10 uh will be needing your support uh you will be helping rest of the class with your assignment Solutions I know so please don't do that that is the help we expect from

00:21:49 you okay let's move on there's no privacy breach you can safely men your correct city name here why so many people are from jur we considering I as jpur your hometown should be mentioned here so good mixture of class if you plan to have a travel during semester you know where to find your colleagues for Durga Puja you can safely move to Kolkata we'll have lots of uh Hospitality from them Pakistan whoever is from Pakistan please learn that it's not a city it's a country Nepal is also a country not

00:23:08 City we know sikandrabad is in up okay Hyderabad is also sikandrabad Pakistan also has Hyderabad they also has jur jur is a village there in Pakistan USA so if you plan to have foreign visit you know where to stay anyways so great suddenly I have more answers in this case for technical questions 118 for non- technical 124 let's move on so this is one person is still typing so these are different types of questions may appear in your slid of quiz so that's the rehear rehearsal we are doing let's have some dummy Quiz we not

00:24:11 count marks for today's quiz it's just so here you have to mention your role number okay you have mentioned name is it's it's fine but prefer to mention your role number so that we can correlate the marks with your Ro number and if you happen to enter your friend's role number your friend will get marks you will not get marks we don't have any way to trace out who has entered which role number fnt so let's move to the first question it will be timed quiz perhaps So within the time limit you have to answer and click on

00:25:11 submit if you don't click on submit your answer will not be submitted just by choosing the correct answer or wrong answer it will not get submitted you have to click on the submit button so here is the quiz you have 30 seconds and there's no money associated with this question and not playing KBC don't copy nobody knows so during quiz addon instructions are either you look at your screen or look at ceiling don't look here and there and if you find find you are looking here and there immediately you

00:26:05 will be out of quiz and that's the invigilator job during the quiz right so what is the correct answer anyone knows virtual lib yes virtual lib is a library it's not a platform but KVM Kimu and virtual boxes are L ones okay so during the quiz you will immediately get to know whether you have marked it right or wrong I think there's one more question yes again 30 seconds and there can be multiple correct answers so right now you are getting checkbox and if you mark all the correct answers then only you will get one Mark

00:27:04 otherwise zero there's no negative marking and you will not get these easy questions in your actual quiz so those 5 6% people I think they have not read the word not so the question is which is not a cloud Computing platform and the answer is Watson and GitHub they provide cloud services but they are not cloud computing platform where you can develop applications uh using the cloud resources which are built for cloud and when I say when an application is built for cloud we mean something significant

00:27:53 that will be covered as part of this course so after quiz you will get this kind of Fame which has no value as such the only thing is how many of you have answered correctly and this is time based so okay okay any question regarding course Logistics uh there will be uh YouTube channel on which all the class recordings will be uploaded you can watch it again and again and that channel link will be shared uh if by chance I miss to upload any video maybe only one of you not all can remind me or TS can also keep T whether

00:28:49 videos are uploaded so you can remind me and uh it will take one or two days time to to upload the video because Google processes the videos and then share the uh recordings with us and then I upload on YouTube okay uh assignments will be also announced well in advance for each assignment at least you will get 10 days to solve it and uh if possible we will announce all three assignments within this month itself and the deadline will be like in February March or April so plan your workload uh in a way that you don't ask

00:29:41 for deadline extension there's no deadline extension for any of the component uh till last class offering we will uh not uh we accepting submissions even after deadline but from this soft we will not accept submission after the deadline until unless you produce some medical certificate for yourself that you were on bad rest for the duration from the announcement of quiz to the deadline so I'm announcing I'm saying we'll announce all the assignments and quizzes in January itself so you plan your workload in a way your case study

00:30:28 submit your project submission deadline will will be also announced well in advance there's no harm if you can complete all the components by February or March we'll encourage those things and Tas are there to support you technically or non-technically uh we'll be happy to support you before the deadline after the deadline don't ask for support it generally happens at way around we get lots of emails for asking for support after the deadline or after the exam that we may not be able to provide any other question or

00:31:14 doubt so for regular people 100% attendance will carry 10% marks and uh if you miss anyone then according to your uh marks will get be uh hemper uh the attendance is also physically and mentally you should not be doing daydreaming while sitting in this class planning for your enterpreneurship business and doing some architecture designed for your another project you'll be attending classes you will be interacting with me uh my classes are generally interactive uh I encourage to all of you to ask lots of question questions so

00:31:59 that all of you can get benefited and this course is more system oriented uh if you are good at programming that's good if you are not good at programming or with system commands you have to pick up it so for that purpose we will share some Linux cheat sheet uh you can practice them and pick up your system aspect uh it's not a theory course lots of classes will be also uh taking example of real word scenarios and then uh making on top of that and then bringing to technological Concepts uh it's not a theory where I

00:32:43 just keep writing on board and you just keep making notes making notes is a good idea but might not be possible in live class because uh sometimes topic switching contact switching happens when very fast but I encourage you to make your own notes uh by watching uh videos or live lectures so any other question regarding class Logistics or course clear how many of you are from CS background in person mode okay great there any specific system requirements like WSL would do or not yeah good question I'll I'll talk

00:33:37 about that in more detail okay sir uh ashutosh Ravi Gupta is asking sir can offline students join online of course you can join online but attendance will not be given to you for those classes right only if you are present in person mode in lhb 308 during 2 to3 or 62 7:30 then you will get attendance fine okay uh regarding system requirement in general in my course your system should not have Windows the people who are laughing out loud I know you have windows so request to their friends today format their laptop they

00:34:36 will themselves install Linux then take the backup of data format it install Linux your course learning or aptitude towards computer science or computer machine your quality of assignments you will see the clear difference if you use Linux as compared to Windows Mac OS is also Linux but Windows is not Linux so Mac OS is fine any flavor of Linux is fine uh like ov2 Fedora davan AR Linux tiny OS so you can have any version of Linux or Mac OS which is fine and uh system requirement is uh as such if you wish to do the

00:35:37 complete assignment you might need maybe more than 100 GB Ram it's okay if your machine doesn't have it that's the Crux of this course why do we need Cloud because our system requirement is not fitting well with the one physical machine or one commodity Hardware so I'm assuming all of you have commodity Hardware not server class machines uh we uh don't encourage using any server class machine because they are expensive you build your own server with commodity hardware and that's where your group will

00:36:23 help at least you will have two machines to play with for assignments also you can use your colleagues machine to solve assignments but make sure that you don't copy your colleages assignment you do it yourself don't give them flavor uh favor that because they have given you machine you give them assignment no Revenge system uh so you share your machines with your colleagues to solve your assignments and projects you try to use multiple machines try to learn how to use multiple machines create clusters out of

00:37:05 that create a mini Cloud out of those machines that's all about this course so system requirement is if you have lower specification of system higher chances that you will learn more if you have good expensive laptop higher chances that you will miss many of the learnings from this course okay so this is the one course where common men have more Advantage as compared to rich people right any other question or doubt okay there are yes so then can we use this WSL and using Ubuntu in there or come

00:37:57 again what in yeah in using WSL if we install want to in in our windows and uh use that good question uh there are funny answers for this uh you cannot have you should not have two girlfriends or two boyfriends at the same time things will not work longer so if you try to install Windows inside UB 2 Linux or Linux inside windows I've seen many of the many people including myself I was also like you I was also asking same question when I was doing btech things doesn't work more than two months very short Liv relationship will

00:38:53 be there between OB 2 and windows and it's not only that 22 will get corrupted if you install inside windows your windows will get corrupted and your data may also get lost but it's up to you if you wish to if you want to take risk but uh your assignment deadline your project deadline or your exam you should not complain that because uh when you work on your project that's the only you know Peak period when you will use more system or your laptop and that's the high probability where your system will

00:39:37 get break uh people who are working with me they have nice experience not nice strange experience that the moment they come to my office the system is STO working it was working just outside my office people are also laughing manik mayang they are working on some projects with me so that should not be considered as excuse for this course because when you run heavy programs High chances that your system will break and if you have not formated your laptop three or four times during this course you have not learned in this

00:40:27 course I used to format my laptop almost every third or fourth week during my btech I was learning myself no one was teaching me Linux and that time installing Linux used to take 3 4 hours nowadays it's only less than 20 minutes job so learn how to format your laptop your friend's laptop and don't get blamed that you have formatted their laptop how to ensure data is backed up despite system failures that's the biggest learning you can get from this course so more you play with your laptop your system more learning you will get

00:41:10 from this course and I can give you in writing that the learning which you get from breaking your system you will not get from attending lectures or appearing for exams or doing projects uh yesterday icmr tele medicine system was not working and manik was working on resolving that problem by the way that problem is still there if you look at the WhatsApp so he he spent around one day with his uh team and problem were not getting solved and in the evening he told me about the problem and I told him that

00:41:56 okay use Virtual Machine and within 10 minutes things started working system wise so until unless you don't face the actual uh you know system breakdown that learning will be theoretical and this course is system course regarding the job aspect of you know becoming system hardcore system guy don't mind and I can see there are a few people who are from AI domain there's a crowd going in AI domain and we are lacking a f systems capability you know in India when Flipkart started uh thinking about setting up data center in India their

00:42:45 own data center in India before that guess what where they were hosting their own server Amazon Cloud and they were competing against as 10 and the moment they realized that they can be in big trouble because all their data is on Amazon Cloud and they are competing with Amazon itself they started architecting about having a data center in India and they could not find expertise who can set up data centers in India so we have huge gap in Industry huge scope is there if you become a system admin you will be relaxed you will not

00:43:32 be running gii model again and again doing system task and you know how to deal with system if you learn it [Music] properly are you covering can we use Virtual Linux box that will be part of your assignment you'll be asked to use Virtual box but if you do assignment inside virtual box that will be difficult and the reason uh why that will be difficult we will cover as part of our course that's a technical Reon there's a technical reason another question is are you covering the kubernetes as part of the

00:44:16 cabus not as such but you can cover it as part of your project or research paper implementation or case study right okay so any other question any other doubt course is good right you're finding it interesting or not anyway can't do anything there's no choice if you wish to do this course you have to do it uh what happens if you use Virtual Machine virtual box is there another layer which will occupy your computer resources so your your virtual machine say if you give uh if your laptop has 4GB Ram you can create one virtual

00:45:14 machine of say 2 GB Ram inside your laptop but that 2GB Ram of VM versus 2 GB Ram of physical machine we'll see that there is a clear performance difference because now we have additional layer which is converting all your virtual machine system calls to physical machine system calls and that will occupy some time that will occupy some computer sources so if you're planning to do your assignments inside virtual box you can imagine that you have to spend maybe double the amount of time on your assignment which generally you people

00:45:56 don't have right and uh second thing is there are further chances that if you use Virtual box for longer time your other system Library may start it throwing some bugs or errors so there are some good use cases where you should use Virtual Machine there are some Contra indicators where you should not be using virtual machines so we need to learn as a system people we need to learn when to use Virtual box when to use container when not to use any virtualization or when to use public cloud or private cloud or hybrid cloud

00:46:42 or Community cloud or when to use uh multiple clouds multiple vendors or Cloud so all those questions will get answered as part of this course I will not be answering them you will be getting answers because you will be knowing the technical reason behind all these issues I'm assuming all of you have either desktop or laptop tab or mobile may not help you in doing assignments any other question or doubt yes H um sir we understand your point about the having a standalone operating system for it but I it might be funny

00:47:43 but getting rid of Windows would be a a little harder job than uh it's actually funny yeah I was having same question so I got my first laptop on 28th Fab and that was leap year and I you used 29 Fab all day installed Linux six times because first in first five attempts I could not install Linux properly Sometimes some driver is not working other time other driver is not working but that the day I still remember because that's where I learned what is actually device drivers yeah and how to resolve the issue related to

00:48:30 device drivers many people in my badge who graduated from computer science they were not knowing that device driver is a simple program you can which you can actually copy from somewhere and put it in the correct folder correct file going to if you are using Windows going to registry edit edit those things and it will up and running you don't need to reboot your system if you recall from Windows XP I don't know how many of you use Windows XP but I'm from the generation who used Windows XP we have put new pen drive you need to

00:49:08 restart the Windows XP people are wondering your new generation what it it was the first generation they have updated it in that third generation patch that it will automatically detect yes because of dynamic link library and how Dynamic link Library works D we know dynamic link Library stands for dynamic link library but how does it work we don't know those things you will learn if you deal with system that's the my that's my point yeah so so uh there are two options either we buy another laptop or

00:49:47 the second one is dual boot the current one so dual boot I already mentioned uh don't have to uh commitment at the same time that will be Troublesome not maybe immediately but within two months your system may break down then you will have you know you will suffer major loss as compared to you know getting rid of Windows and believe me your day-to-day systems which you use like Netflix works on Linux perfectly YouTube works on Linux perfectly web browsers works on Linux perfectly I don't know you are using VLC or

00:50:30 something also nowadays but that also works perfectly on Linux so there's no reason you should only commit for Windows MS Office nowadays it's anyway online as part of itj community you will be using anyway Gmail Google Cloud Google Docs so all things are available on Linux okay anything else no sir thank you then by by Windows I guess in my uh learning career uh I have never used windows but I learned windows by repairing others Windows machine my uh room hostel room was famous that anybody gets some problem in

00:51:23 Hostel regarding their laptop that laptop used to come to my room and I used to get to you know experiment with their laptops they believe that I know how to repair but I was not believing that I know how to repair but I learned in that process so learn it it will be fun your life will be exciting when your laptop uh you're formatting just before your final project presentation that is the you know days you will remember after graduating from itage out so generally in my final exams I used to always format my laptop

00:52:02 because I have created a good K CTIC system while working on different projects before the exam and during exams my laptop started giving me lots of troubles so I used to format laptops during exam time only okay that's about the class are youf us was the same here yes okay uh officially we are closing the class but if you have any question any doubt you can stay back otherwise you can leave before leaving make sure that you have marked your attendance and I request TS to do the head count and match the attendance count

00:52:47 before uh letting them go and from the next class onward you do the head counting before the class ends sh

Summary

The course will cover cloud computing, virtualization, and case studies, with class timings set for Saturdays and Tuesdays. Quizzes will be on Saturdays, and clear evaluation policies are outlined.

Highlights

📅 Class Schedule: Classes are held on Saturdays from 2-3 PM and Tuesdays from 6-7:30 PM.

📝 Evaluation Components: Includes quizzes on Saturdays, assignments, and case studies.

☁️ Course Content: Topics include cloud computing, virtualization, and Docker.

🛠️ Hands-on Learning: Virtualization and networking will involve significant hands-on work.

🔍 Flexibility: 20% flexibility in course content to accommodate student needs.

📚 Integrity in Evaluation: Strict plagiarism policy to maintain academic integrity.

🤝 Support System: TAs available for technical and non-technical queries.

Key Insights

⏰ Time Management: The class schedule is designed for working professionals, emphasizing the importance of balancing studies with work commitments. This structure helps in managing time effectively for quizzes and assignments.

💻 Technical Skills Development: The hands-on approach to virtualization and system management encourages students to gain practical skills that are essential in today’s tech-driven job market.

🌐 Broad Course Scope: Covering various cloud platforms ensures that students are equipped with versatile skills applicable across multiple technologies, enhancing employability.

🔄 Adaptable Curriculum: The course allows for adjustments based on student feedback, which promotes engagement and ensures the relevance of the topics covered.

📊 Diverse Evaluation Methods: The combination of quizzes, assignments, and case studies caters to different learning styles and helps assess comprehension from multiple angles.

🔒 Emphasis on Academic Integrity: A clear policy against plagiarism fosters a culture of honesty and responsibility among students, crucial for their professional development.

💬 Open Communication: The availability of TAs for support highlights the importance of mentoring and assistance in academic success, creating a supportive learning environment.