GROUP 6

AN INTEGRATED PLATFORM FOR KNOWLEDGE SHARING

Group members:

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Co-Guide:

Prof. Neha Deshmukh

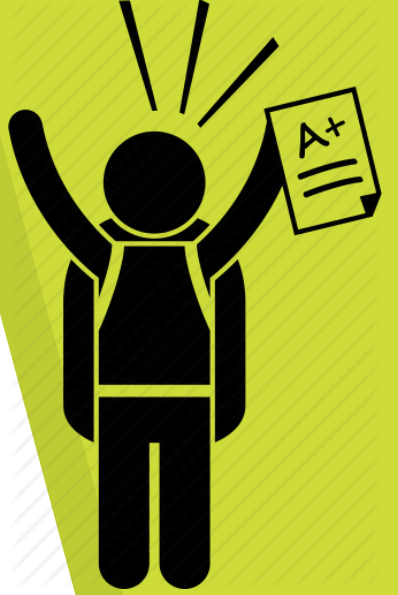
Introduction

- Purpose
  - What?
  - Why?
  - Who?

Purpose of the project

What?

Our motive is to build a network that will help teachers and students of a university to collaborate together to share their knowledge and learn with each other.



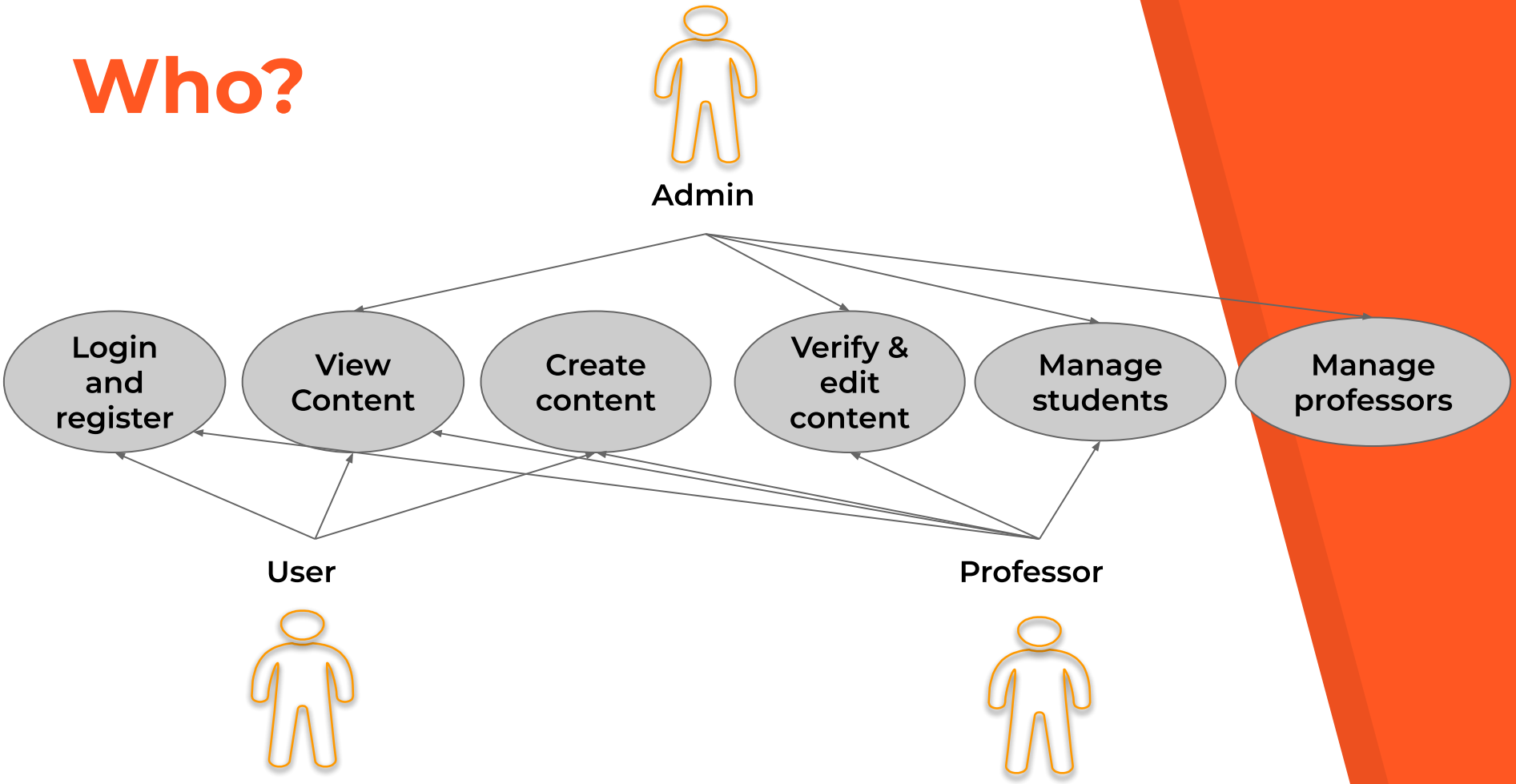
Why?

The problem that comes is there is no single book, portal, website where students of a university can get relevant content for learning of the courses in that particular university. This causes the students to read from various unreliable sources and understanding of the subject is unclear at the end and that leads to less understanding and low score in examinations.

How?

Register	Learn	Teach	Grow
The user will first have to register to the site to create his/her own identity to browse through the entire site	After the sign in, the user will be able to start the process of acquiring new, or modifying existing, knowledge, behaviors, skills, values	If the user has better skills, he can show enthusiasm towards the course materials and students can create a positive learning experience.	Keep exploring the content to enhance your skill set and boost your knowledge through flexible and collaborative learning

Who?


Admin
Login and register
View Content
Create content
Verify & edit content
Manage students
Manage professors
User
Professor

Why did we pick this issue?

- Every student is unique in their own way and one can not grasp the content as efficiently as others. Combining education with social media may have a positive impact and boost student's learning experience
- Due to rapidly developing technology and and new inventions, it is difficult for an individual to catch up with updated content in a shorter time span, we are trying to bridge the gap between today's education and technology in real world
- Being a part of community, it not only motivates you, but also helps development of overall community to create something new

BIG CONCEPT

OF
The students

FOR
The students

BY
The students

ABSTRACT

The issue of what content to be written in exams is generally faced by most of the students. It may happen that a student understands the concept but isn't able to represent it in a way that examiner can understand. Therefore, we intend to build a community source platform that will assist students in preparing for their exams and also for learning a proper skillset.

Problem Statement

The purpose of having a real time crowdsourced textbook creation for university is to help teachers and students of a university to come together to share their knowledge and curate their own academic resources. Also, for professors who curate proper resources for their colleges it will provide a platform to share their content outside their colleges, because of this not only few privileged and lucky students but everyone will get access to the valuable resources.

Key Features

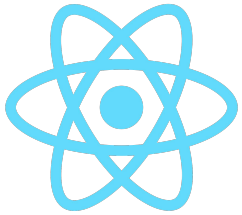
- Rich UI/UX with a ‘Three-click rule’
- The value of the content will criticized by users itself. Evaluation will only be done by professors.
- The question-answers will be automatically generated and evaluated through the system.
- There is a feature where user inputs exam dates and gets a schedule for exam preparation.
- Automated mind-map using tree generation algorithms for revision.

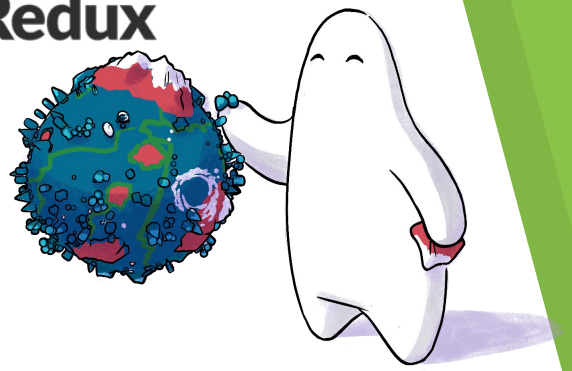
Key Features

- Infinitely scrollable content with cards so the user can keep reading a plethora of content.
- Difficult terms will display their meaning by hovering them.
- Get recommendations to read articles of your liking as you explore the feed.
- Picks up rich keywords to generate automated questions from the text itself for creating a quiz to test yourself.
- Track your progress with progress bar on each module.

Additional Features

- Cloud based storage for database.
- Real time data analytics using visualizations (RethinkDB)
- Gamify the contributions and learning to attach the user to the site.
- Single sign-on (SSO) such as Google or Facebook for hassle-free access to the site.
- Build confidence for test day by planning, curating, learning and evaluating yourself.





Technology stack

- ReactJS
- Redux
- RethinkDB
- Wysiwyg editor
- AWS as PaaS
- Machine Learning / Artificial Intelligence

Project scope

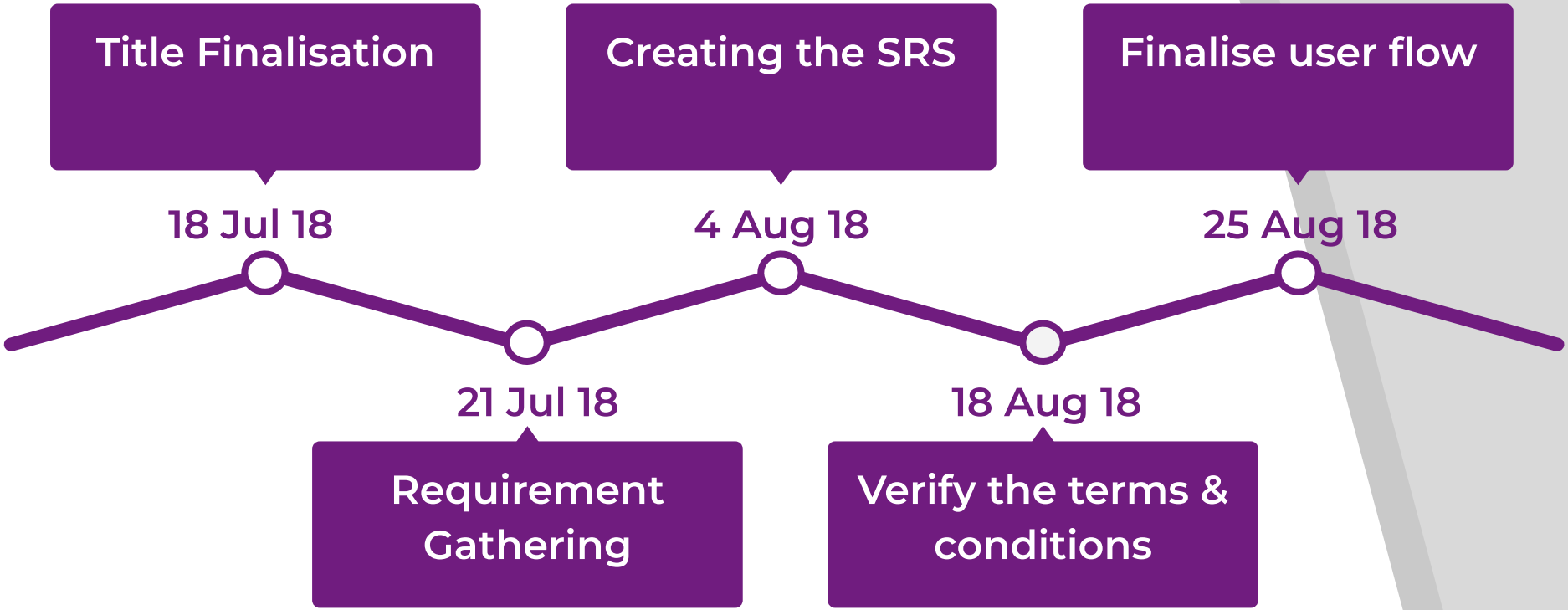
Project objective:

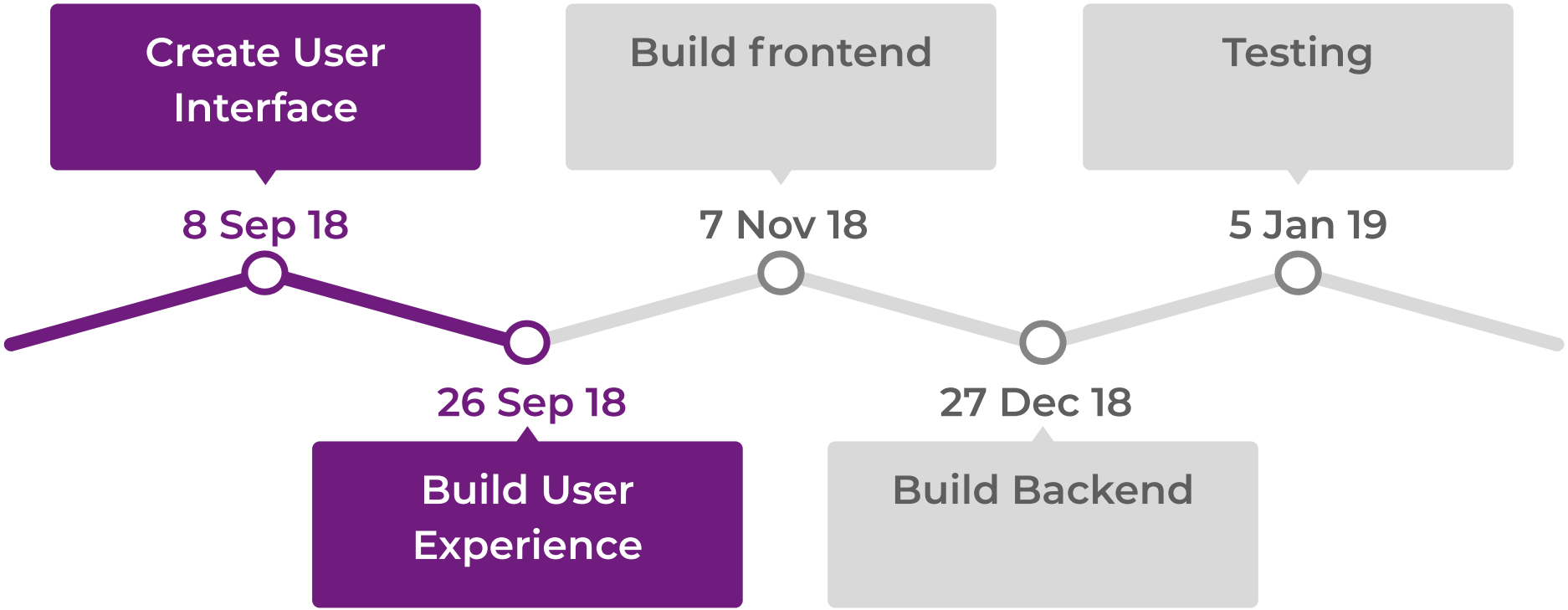
- To create a crowdsourced platform for students and teachers where they can upload and view self made or collaborative content shared by others.

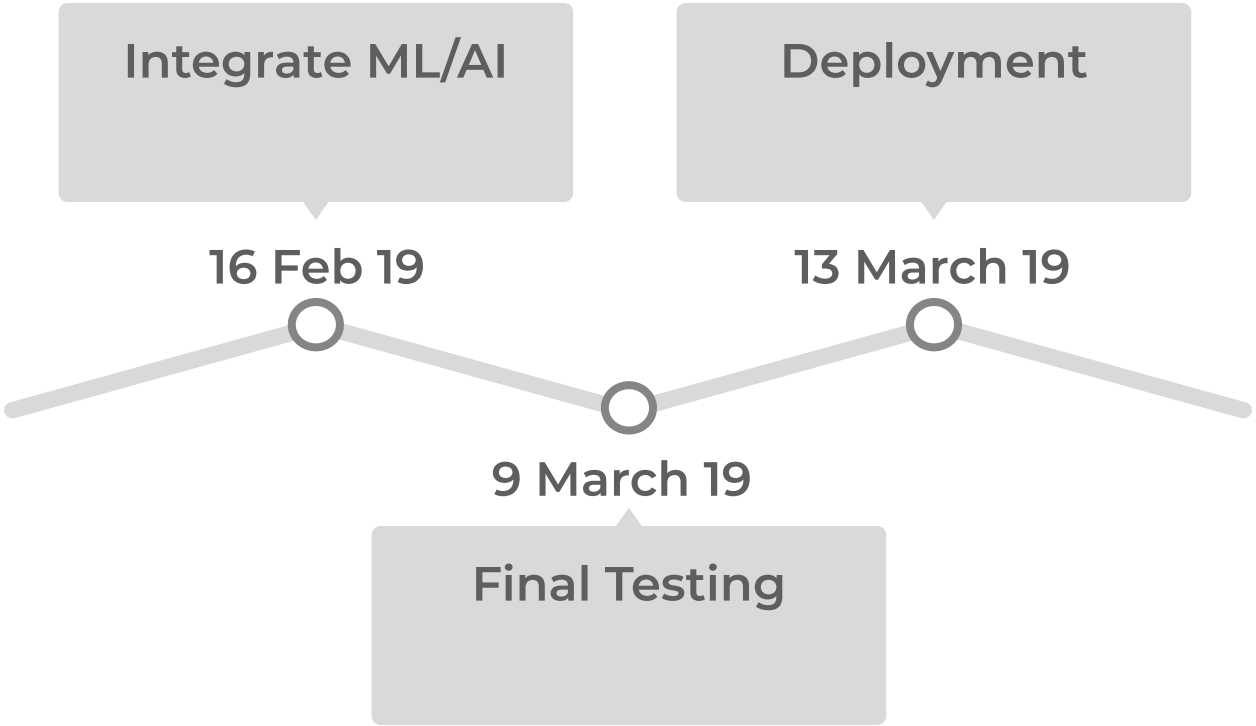
Deliverables:

- A web based academic social network to connect to people sharing same academic domain.

Milestones:


Title Finalisation
18 Jul 18
Requirement Gathering
21 Jul 18
Creating the SRS
4 Aug 18
Verify the terms & conditions
18 Aug 18
Finalise user flow
25 Aug 18


Create User Interface
8 Sep 18
Build frontend
7 Nov 18
Testing
5 Jan 19
26 Sep 18
Build User Experience
27 Dec 18
Build Backend


Integrate ML/AI
16 Feb 19
9 March 19
Final Testing
Deployment
13 March 19

Literature Review

Author name	Methodology	Merits	Demerits
[1] Blanka Frydrychova Klimova, Petra Poulova, Michal Slama	A survey of 2449 respondents 1867 students was undertaken on online courses	As this research showed, a majority of respondents (93% students) welcomed a possibility of having their study materials online.	Students are not used to exploiting the resources because they are not made available in an online medium.
[2] Ivana Simonova, Petra Poulava	Students were provided various types of study materials and their satisfaction with the process was monitored	The participants in the online course expressed their positive approach and satisfaction with the course of study,	Despite the contribution of the learning style theory to the online learning process was not proved within this project

Literature Review

Author name	Methodology	Merits	Demerits
[3] Sucheta Kolekar, Radhika M. Pai, Manohara Pai M.M.	The conceptual architecture is proposed which focuses on adaptive e-learning application	As this research showed, a majority of respondents (93% students) welcomed a possibility of having their study materials online.	---
[4] Rolysent K. Paredes, Alexander A. Hernandez	Misamis University Online Learning Environment used to rate the UX on web services	It is expected that with this approach, future E-Learning applications will concentrate on learner's learning styles and adaptive interface for personalization.	The novelty aspect earned very low. This might due to the students or users do not consider it as a contributing factor for them to have a good user experience

Literature Review

Author name	Methodology	Merits	Demerits
[5] Mahesh S. Patil, Meenaxi M Raikar, Padmashree Desai	Case study of Massive Online Open Course (MOOC)	Students were able to discover more requirements regarding the app features and mobile device requirements	Thus, students are not used to exploiting the resources because they are not made available in an online medium.
[6] Dr.P Pabitha, M.Mohana, S.Suganthi, B.Sivanandhini	Question generation using Supervised learning	proposed system has so far implemented the stemming part using the porter algorithm.	Extracting all nouns hinder the system and generate unnecessary questions.

References

[1] Blanka Frydrychova Klimova, Petra Poulova, Michal Slama, “eLeaming study materials and students' preferences” , 2014 Information Technology Based Higher Education and Training(ITHET) , 2014

[2] Ivana Simonova, Petra Poulava, “Study Materials in Online Courses, Analysis Reflecting Individual Learning Styles”, 2014 IEEE Global Engineering Education Conference(EDUCON), 2014

[3] Sucheta Kolekar, Radhika M. Pai, Manohara Pai M.M., “Adaptive User Interface for E-learning Applications based on Learning Styles using Web Logs Analysis: A Hybrid Cloud Architecture”,TENCON 2015 - 2015 IEEE Region 10 Conference, 2015

[4] Rolysent K. Paredes, Alexander A. Hernandez, “Measuring the Quality of User Experience on Web Services: A Case of University in the Philippines”, 2017 IEEE 9th International Conference on Humanoid, Nanotechnology, Information Technology, Communication and Control, Environment and Management (HNICEM), 2017
[5] Mahesh S. Patil, Meenaxi M Raikar, Padmashree Desai, Vijayalakshmi M, Shivalingappa Battur, Parikshit H, G.H Joshi,“Leveraging Student Project through MOOC on UX:Case Study” 2016 IEEE 4th International Conference on MOOCs, Innovation and Technology in Education (MITE)
[6] Dr.P Pabitha, M.Mohana, S.Suganthi, B.Sivanandhini, “Automatic Question Generation System”, 2014 International Conference on Recent Trends in Information Technology

Thank you for your attention!
We hope you enjoyed our presentation!