

# **DISTRIBUTED LECTURING AND EXAMINATION SYSTEM (DLES)**

Project ID: PDCN-27

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# INTRODUCTION

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## PURPOSE OF SRS DOCUMENT

- It describes:
  - Functions and Features
  - Issues related to the system
- Actions to be performed by the development team

# SCOPE

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- ✖ Real time lecture conducting/viewing
- ✖ Downloading lecture materials
- ✖ Real time whiteboard viewing
- ✖ Previewing lecture slides
- ✖ Recording and storing lecture videos
- ✖ Viewing the lecturer/student
- ✖ Lecturer and student interaction
- ✖ Online examination center with real time monitoring



# OVERVIEW OF SRS

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1<sup>st</sup> & 2<sup>nd</sup> chapters



**End user**

- ✖ Overall description
- ✖ System interfaces requirements
- ✖ product functions

3<sup>rd</sup> chapter



**Developers**

Specific requirements

Performance

Design constraints

# OVERVIEW OF DLES

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- ✖ Web based application



















# SYSTEM DIAGRAM

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## × Animation

# USER REQUIREMENTS

## ✖ Product Comparisson

Products	Live lecture materials sharing	Real-time whiteboard	Examination system	Web based
eLecta Live				
INTOWEB				
Virtual Blackboard				
DLES				



**Real Time Lecture  
Conducting/Viewin  
g**

**Real Time Slide  
Previewing**

**Software  
Whiteboard**

# **DISTRIBUTED LECTURING & EXAMINATIONA SYSTEM**

**Online Examination  
System**

**Online Video  
Conferencing**

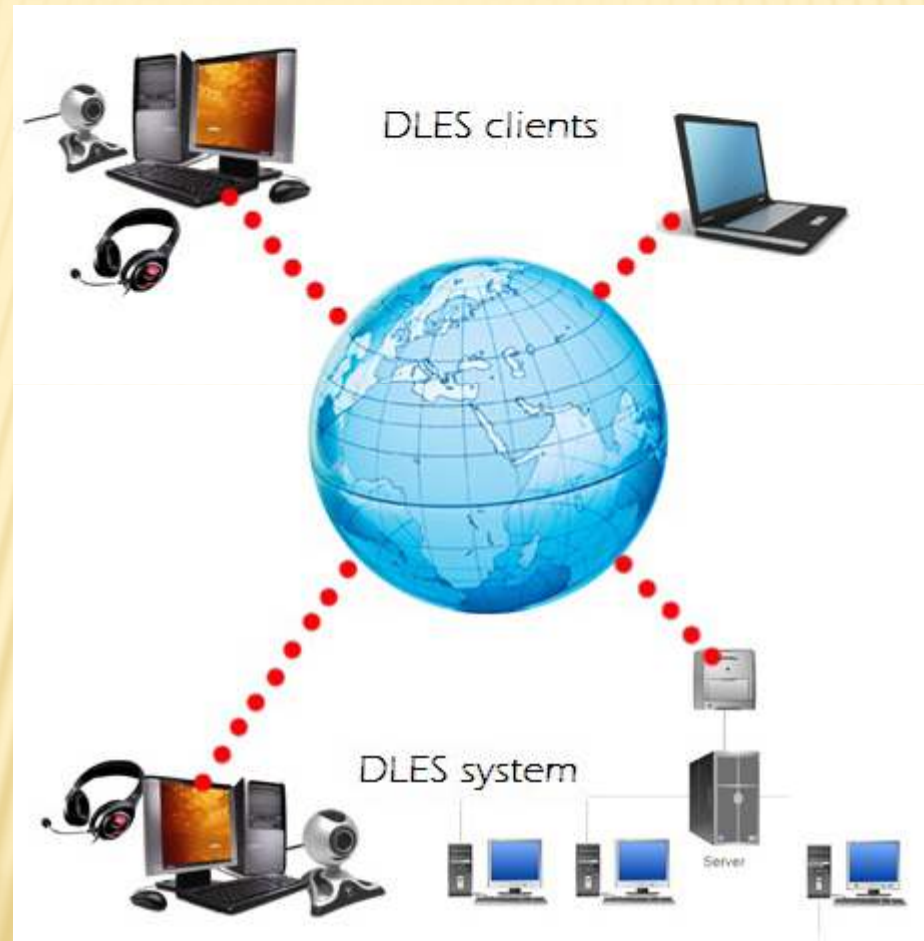
**Social Network**

# USER INTERFACES

- ✗ Login Interface
- ✗ Main System Interface
- ✗ Exam Interface

Software Interfaces	Hardware Interfaces
Windows / Linux OS	Computer Head set
MySQL Workbench	Webcam
NetBeans IDE	Min 56kbps bandwidth internet connection

# COMMUNICATION INTERFACES



# SYSTEM REQUIREMENTS

Client	Server
Windows / Unix / Linux	Windows / Unix / Linux
Java script enable web browser	Java Enabled
Flash player installed	Apache with PHP installed
Java Enabled	MySQL installed
	Red5 installed
RAM – as required by the OS (128MB free)	4GB RAM (for production environment)
CPU – as required by the OS	Xeon recommended
HDD – 100MB free	2TB or More
1024 x 768 with depth of 16 (minimum)	N/A
512kbps (minimum)	16mbps recommended



# NON-FUNCTIONAL REQUIREMENTS

- ✗ Interface requirements
  - + Gives the student community a new concept of sharing the knowledge
- ✗ Performance requirements
  - + **Reliability** : uptime of 95%
  - + **Security** : User privilege and admin privilege
  - + **Survivability** : need to survive physical disaster
  - + **Time** : acceptable lag of 15 ms

# NON-FUNCTIONAL REQUIREMENTS CONT...

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- ✖ Operating requirements
  - + **Client-end** : normal internet user
  - + **Server-end** : system administration knowledge
- ✖ Lifecycle requirements
  - + New functions includable – modular concept
  - + Life time depend on server's performance
- ✖ Economic requirements
  - + High end server cost + bandwidth cost

# RESEARCH COMPONENT

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- ✖ Whiteboard and lecture slide preview
- ✖ Video multicasting
- ✖ Examination center

# EXAMINATION CENTER

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- ✖ Tests can be created on a random basis per student..
- ✖ A time limit can be set for the test
- ✖ Allows jumping to specific questions
- ✖ Automatically generate results.



# TYPE OF QUESTIONS

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- ✖ Multiple Choice
- ✖ Multiple Response
- ✖ Fill-in the blanks
- ✖ Numeric

# EXAMINATION SECURITY

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- ✘ Only registered students are able to access a test.
- ✘ The test can be made available on specific dates.
- ✘ The test can be made available at specific times.
- ✘ The number of times students access tests can be set.



**Thank You...**