

**Project Phase II**

**Topic:**

**System Context**

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Table of Contents

[System Context 2](#_Toc148694353)

[System Context for Learnova 2](#_Toc148694354)

[1. Creating and delivering courses: 2](#_Toc148694355)

[2. Managing student accounts: 2](#_Toc148694356)

[3. Personalized AI responses: 2](#_Toc148694357)

[4. Communicating with classmates and instructors: 2](#_Toc148694358)

[5. Accessing course materials 2](#_Toc148694359)

[6. Integration with other systems: 2](#_Toc148694360)

[7. A library of courses for students: 2](#_Toc148694361)

[8. A platform where teachers can start their courses and sale: 2](#_Toc148694362)

[9. A library of other material topics in which students interested: 2](#_Toc148694363)

[External Factors 3](#_Toc148694364)

[1. Technology: 3](#_Toc148694365)

[2. Security: 3](#_Toc148694366)

[3. Educational standards: 3](#_Toc148694367)

[4. User needs: 3](#_Toc148694368)

[Interactions between Learnova and its environment 3](#_Toc148694369)

[Context facet 3](#_Toc148694370)

[Subject facet 3](#_Toc148694371)

[Usage facet 3](#_Toc148694372)

[IT system facet 4](#_Toc148694373)

[Development facet 4](#_Toc148694374)

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# System Context

System context, in the context of software or systems development, refers to the external elements and conditions that surround and interact with a particular system. It involves identifying and understanding the environment, stakeholders, interfaces, and boundaries of the system being developed. System context helps provide a clear picture of how the system fits into the larger ecosystem and how it interacts with other systems and components. It is an important aspect of system design, as it ensures that the system meets the needs of its users and integrates effectively with other systems or processes.

## System Context for Learnova

Learnova is a cloud-based learning management system (LMS) that supports the online learning activities of teachers and students. It provides a variety of features, including:

1. Creating and delivering courses: Teachers can create and deliver courses to students, using a variety of media formats, such as text, images, videos, and audio.
2. Managing student accounts: Teachers can create and manage student accounts, track student progress, and provide feedback.
3. Personalized AI responses: Learnova uses AI to provide students with personalized feedback on their work. This feedback can help students to identify their strengths and weaknesses, and to improve their learning.
4. Communicating with classmates and instructors: Teachers and students can communicate with each other using the discussion forum and private messaging features.
5. Accessing course materials: Students can access course materials, such as documents, presentations, videos, and other types of files, from anywhere with an internet connection.
6. Integration with other systems: Learnova can be integrated with other systems, such as Google Workspace, Microsoft Office 365, camera, recording device of mobile, WhatsApp, files and images. This allows teachers and students to use Learnova in conjunction with other software that they are already using.
7. A library of courses for students: Learnova provides students with access to a library of courses on a variety of topics.
8. A platform where teachers can start their courses and sale: Learnova provides teachers with a platform to create and start their own courses.
9. A library of other material topics in which students interested: Learnova provides students with access to a library of other materials on a variety of topics, such as books,articles, videos, and podcasts.

# External Factors

External factors that can affect Learnova

The following are some of the external factors that can affect Learnova:

1. Technology: Learnova is a cloud-based system, so it is reliant on the availability and reliability of the internet. Any disruption to the internet service could impact the ability of teachers and students to use Learnova.
2. Security: Learnova stores and processes a variety of sensitive data, such as student data, course data, and assignment data. It is important to protect this data from unauthorized access, use, disclosure, disruption, modification, or destruction.
3. Educational standards: Learnova should be designed to meet the educational standards of the countries and regions where it is used.
4. User needs: Learnova should be designed to meet the needs of its users, including teachers and students. It is important to gather feedback from users and to use that feedback to improve the system.

# Interactions between Learnova and its environment

The following are some of the key interactions between Learnova and its environment:

* Teachers use Learnova to create and deliver courses, manage student accounts, and track student progress.
* Students use Learnova to access course materials, complete assignments, and communicate with teachers and classmates.
* Learnova integrates with other systems, such as Google Workspace, Microsoft Office 365, camera, recording device of mobile, WhatsApp, files and images.
* Learnova stores and processes a variety of data, such as student data, course data, and assignment data.
* Learnova is accessible from anywhere with an internet connection.

# Context facet

## Subject facet

Objects and events relevant for the Learnova system:

* Students
* Teachers
* Courses
* Assignments
* Grades
* Feedback
* Learning materials

## Usage facet

Aspects concerning the usage of Learnova by people or other systems:

* Educational laws and standards
* Accessibility requirements
* Privacy and security requirements
* Integration with other systems

## IT system facet

Objects and elements of the IT system environment of the Learnova system:

* Cloud infrastructure
* Learning management system software
* AI-powered feedback engine
* Mobile app

## Development facet

Aspects concerning the development process of the Learnova system:

* Agile development methodology
* Automated testing
* Continuous integration and delivery

These are just a few examples of the subject, usage, IT system, and development facets for the Learnova system.