# **Chapter 2: Analysis for Online Examination System**

# Introduction:

After analyzing the basic requirement our main aim is to analyze or identify the problem and knowing its main context. The first thing is to understand the system requirement and the domain of developing new system. Both actions are correspondingly significant, but we focus on the first activity which leads to serve basic functional specification and finalize the successful design for proposed system. Our main task is to do feasibility study, software-hardware requirement, use-case (to identify the roles of actor), initial class diagram.

## Requirement Specification:

Proposed:

The main propose of online examination is to support educational institutions and other form to create exam form student or candidate in an automated manner. It also reduces the time consumption and paper works. The result is recorded in the database which makes easier to search the record of each candidate. The exam will be automated which helps the fact knowledge of any candidate.

Scope:

* OES can be used in both educational institution and overall corporate world.
* The system knobs all the functionality and generate test exam organize by the faculty and review the feedback and provide the test.
* OES is cost-effective and fabulous techniques to take exams.
* The administrator prepares the question for each exam within the system.
* The student can login the system to give exam by their enrollment code number facilitated by the college or university.
* The question pattern will be the multiple-choice question in a random way according to their courses.
* It is web-based application or website so, It can be applicable for anywhere or at any time.

Software requirement:

* Operating system- Windows XP, 10 and other.
* Front End: Subline text or Notepad++
* Back end: MySQL
* Browser: Internet Explorer or Google Chrome
* Programming Language: PHP, HTML5, bootstrap, jQuery, CSS
* Local server: XAMPP

Hardware requirement:

* RAM: 2GB or higher
* Hard Drive-80 GB
* Processor:1 GHz or higher
* Screen resolution: 1024 \*768 resolution for better experience.

## Natural Language Analysis:

## Use Case Diagram:

It is the behavioral diagram which is defined or created from the Use case analysis in the form of Unified Modeling Language (UML). The main aims of the analysis are to overview the functionality or role of actors within the system. It also shows up the dependencies between the use case and actors.

A close up of a map

Description automatically generated

## Initial Class Diagram:

## Brainstorming:

## Feasibility Study:

It is used to measure the how the system is beneficial to any organization through this website. This is done by the research and investigation or general idea of online exam that can be implemented in the automated system. We also cover the impact on organization and ability to meet user requirement with effective use of resources. We also deal with different types of feasibility study which are listed below with descriptions.

* Economic feasibility:

It is commonly called cost benefit analysis which determine how system give benefits with candidate registration fees and compare with their costs. It is the most frequently used technique for assessing the usefulness and performance of the system. If the benefits balance the cost the further process is made for design and implementation. It reduces the cost used by manually in comparison with automated system. If the candidate registers with the OES they can give up to date activities. Thus, the system is economically feasible.

* Technical feasibility:

For OES the resources provide as hardware