Detailed Software Technical Design (DSTD)
For
V-ACADEMY

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Document Revisions

Date	Version	Description	Author	Reviewer	Approver

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1 Introduction

1.1 Purpose

We are an upcoming e-learning service provider in the country for various school curriculums. Currently the systems possess the basic provisions to

- View the curriculum and respective course content
- Upload Course content in terms of videos
- Practice tests and mock tests.

1.2 Scope

Our services are well received due to the rich content and friendly video courses. It is our turn to make our system robust enough to make it more easily accessible. We are planning to expand our services in the below modes and develop below features to make it more user friendly with rich content.

1.3 Definitions, Acronyms and Abbreviations

1.4 References

[This sub-section must provide a complete list of all references. Identify each document by title, document number and the version. Specify the sources from which the references can be obtained.

2 Assumptions

[List the assumptions, if any, here.]

3 PROJECT OVERVIEW AND USECASE DIAGRAMS

1.Courses and study material related to all main competitive exams.And also provides well professional skills such as management,programming languages.

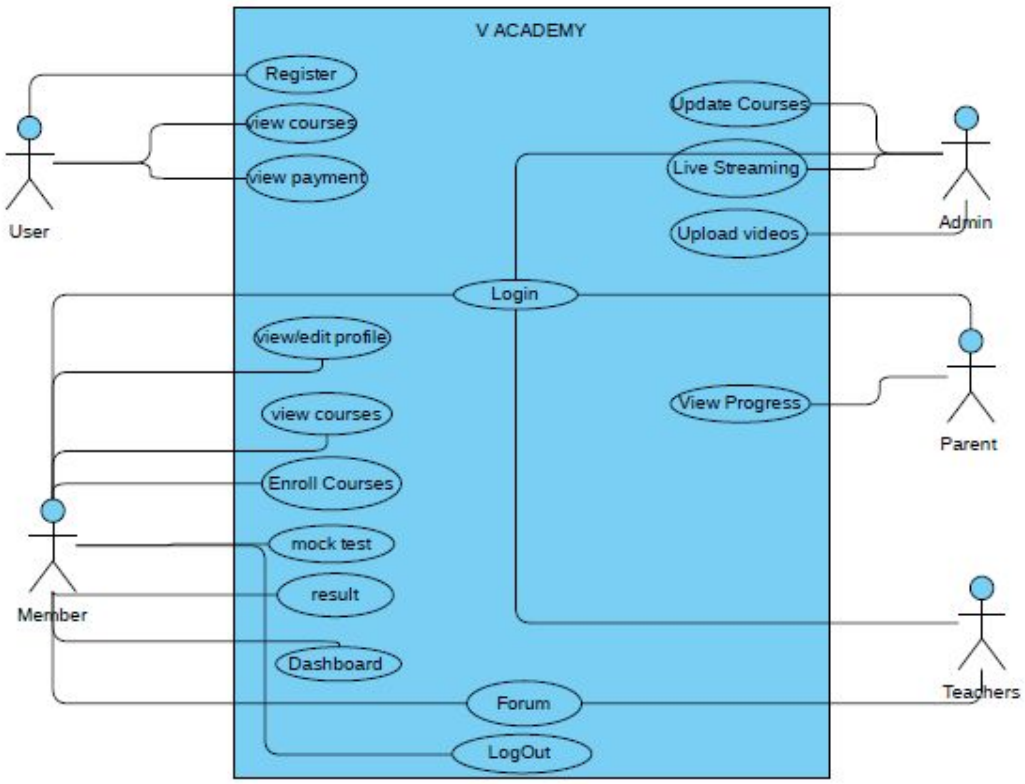
2.Save courses and lessons to your ‘library’ and pick up from where you left with ease.

3.Access live stream,quizzes and clear doubts with a subscription.

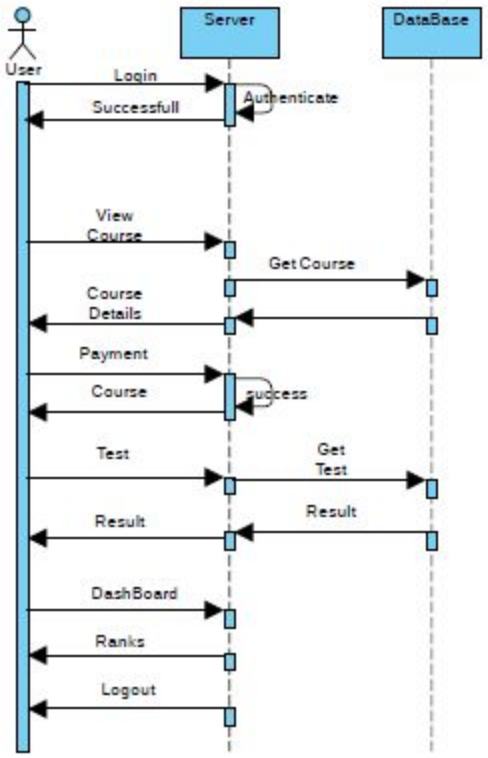
4.Local video lessons are used to explain even the most complex subjects easily with simpler examples.

5.Parents can keep track of children’s progress.

6.Students of all ages will find something to learn with many courses by year(1st to 12th standard,higher education).


V ACADEMY
Register
view courses
view payment
Update Courses
Live Streaming
Upload videos
User
Admin
Login
view/edit profile
view courses
Enroll Courses
mock test
result
Dashboard
Forum
LogOut
View Progress
Parent
Member
Teachers

Detailed Design for Module:



3.1 *Detailed Design for Feature:* <<Feature Name>>

[This section describes the detailed design for the feature including the user interface design.]

3.1.1 User Profile

[Describe the different user types with the security profiles and specify the roles that can access these screens.]

3.1.2 Navigation Map

[Describe the navigation map along with use case traceability of all screens for this feature.]

3.1.3 UI Screen Design

Page Summary	
Name	Search for Customer File
Description	The user retrieves the customer information based on the search criteria such as File ID, last name, first name, middle name, business name, SSN/TIN, address, city, state and/or zip.
Use Case Number	UC-002

3.1.3.1 *Screen Layout*

[Include a screen shot and describe each element/button in the following table.]

3.1.3.2 *Validations*

Error Trigger	Action	Description
If the user group is not selected.	Displays the message “Please select a User Group from the list”.	Prompts the user to select an entry from the User Group list.
User enters an invalid date	Displays the message “Enter a valid date. The date must be in <mm-dd-yyyy> format”.	Displays invalid date message.

3.1.4 Object Model/Data Flow Design

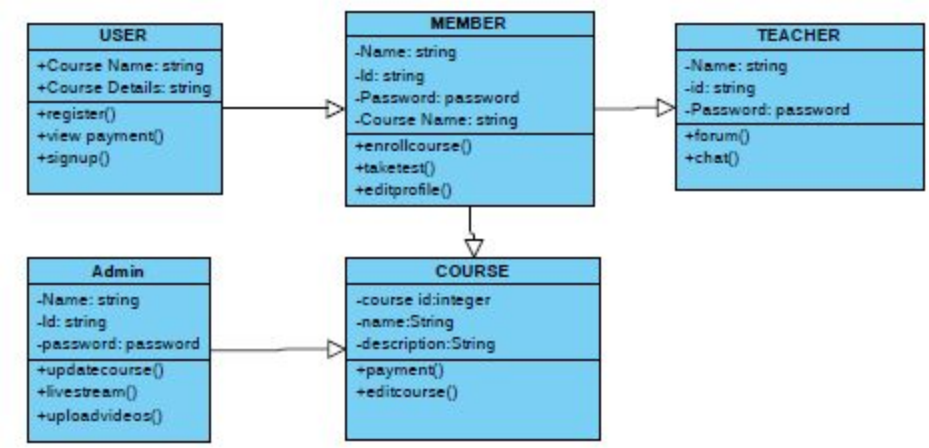
[This sub-section describes the detailed design for the system pertaining to the <<Feature Name>> feature. Interaction diagrams showing the details of the

component structure, behavior, or information/control flow may be included in the sub-section devoted to that particular component.]

3.1.4.1 *Interface Description*

[Describe the interfaces including component interfaces and interfaces to other systems, products, or networks.]

3.1.4.2 *Class Design*



3.1.4.2.1 Algorithmic/Business Logic Description (Optional)

[Describe complex algorithms used in the class (if any).]

3.1.4.2.2 Local Data Structure (Optional)

[Describe key data structure algorithms used (if any).]

3.1.4.3 *Data Transfer/Value objects*

[Based on the design pattern being used, identify and describe the value/transfer objects.]

3.1.4.4 *Related Database Tables*

[Give the list of related database tables.]

3.1.4.5 *Dependencies with Other Sub-systems/Components*

[Describe the dependencies with other sub-system/components, if any.]

3.2 ***Detailed Design for Feature:*** <<Feature Name>>

Repeat all sub-sections given in 3.1 for this feature.

4

Detailed Design for Module: <<Module Name>>

[Detailed design for Module 2.]

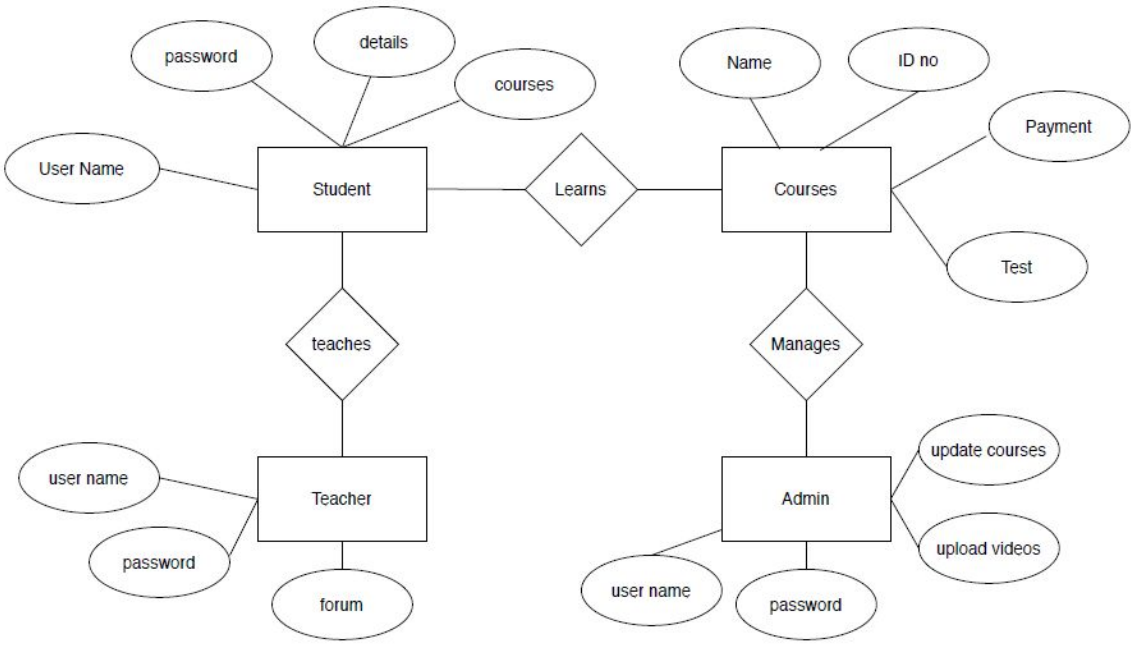
Repeat all sub-sections given in section 3 for this module.

5 Database Design

[This section describes the persistent data and metadata used and generated by the module/sub-system. This will include database schemas (if the database schema is large, use a separate document for database design), registry structures, property file structures, etc.

Models	Tools
Database Entity Relationship Diagrams	ERWin
Object Models	Rational Rose

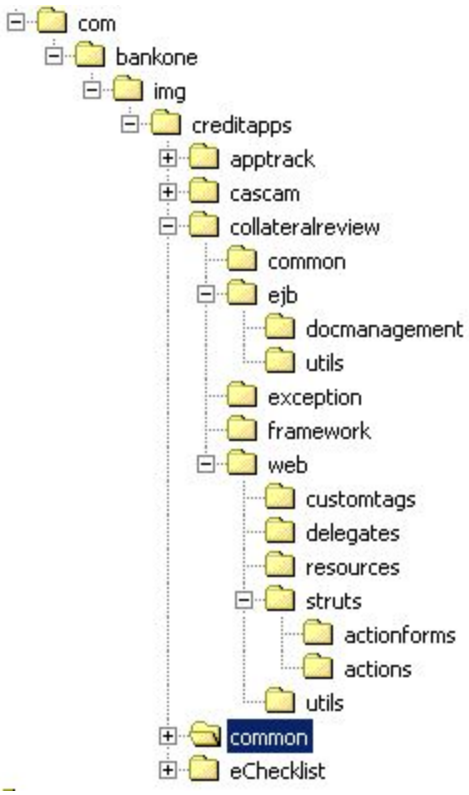
5.1 Entity Relationship Diagrams



Packaging/Folder Structure and System Artifacts

[This section describes the file structure for the <Project Name> project, which will indicate where the code, unit tests, executables, libraries, etc. are to be placed during implementation. Optionally the file structure can be described in a separate GA chapter and a reference given here.]

[Sample structure



End Sample Structure]

5.2 System Artifacts

[Provide information on the Registry structure, INI files, property files, configuration files, etc.]

6 Core Technical Services Design

[This section describes the detailed design and usage pattern for the core technical services of the system.]

6.1 Persistence

[This sub-section captures the detailed design and usage patterns of the persistence service for the application.]

6.2 Inter-process Communication

[This sub-section captures the detailed design and usage patterns of the inter-process communication framework for the application.]

6.3 Authentication and Authorization

[This sub-section captures the detailed design and usage patterns of the security services for the application.]

6.4 Error Handling

This sub-section captures the detailed design and usage patterns of the error handling services for the application.]

6.5 Logging

[This sub-section captures the detailed design and usage patterns of the logging framework for the application.]

6.6 Transaction Management

[This sub-section captures the detailed design and usage patterns of the Transaction Management service for the application.]

6.7 Other Applicable Technical Services

[This sub-section captures the detailed design and usage patterns of the other core technical services to be handled by the system such as the installation mechanism, failure prevention, fault tolerance, caching design, internationalization, validation framework, client and server initialization, error handling, etc.]

9 Non Functional Requirements

Appendix

[Presents information that supplements the design specification.]

1. Design Metrics to be Used

[A description of all design metrics to be used during the design activity is listed here.]

2. Supplementary Information

[Provide as required.]

3. DQI – Design Quality Index Checklist

This checklist shall be used to perform self-review as a reference while preparing software design.

DQI-Design Quality Index Checklist-1.00.