**HIGH LEVEL DESIGN DOCUMENT**

ON

**ONLINE LLR APPLICATION SYSTEM**

**BY**

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**PROJECT CODE: OLAS-01**

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| **Project Code:** | OLAS-01 |
| **Project Name:** | Online LLR Application System |

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| Software Used | Mainframe MVS (ZOS) |
| Data Access Method | VSAM (Virtual Access Method) |
| Programming Language | COBOL |
| Execution | JCL ( Job Control Language) |
| Processing Mode | Batch Processing / Background Mode |

* SOFTWARE OVERVIEW:

MVS (Multiple Virtual Storage) is an [operating system](https://whatis.techtarget.com/definition/operating-system-OS) from IBM that continues to run on many of IBM's [mainframe](https://searchdatacenter.techtarget.com/definition/mainframe) and large [servers](https://whatis.techtarget.com/definition/server). MVS has been said to be the operating system that keeps the world going and the same could be said of its successor systems, OS/390 and [z/OS](https://searchdatacenter.techtarget.com/definition/z-OS). The payroll, accounts receivable, transaction processing, database management, and other programs critical to the world's largest businesses are usually run on an MVS or successor system. Although MVS has often been seen as a monolithic, centrally-controlled information system, IBM has repositioned it (and successor systems) as a "large server" in a network-oriented distributed environment, using a [3-tier application](https://searchsoftwarequality.techtarget.com/definition/3-tier-application) model.

* VSAM:

VSAM stands for Virtual Storage Access Method. VSAM is a file storage access method used in MVS, ZOS and OS/390 operating systems. It was introduced by IBM in 1970's. It is a high performance access method used to organize data in form of files in Mainframes. VSAM is used by COBOL and CICS in Mainframes to store and retrieve data. VSAM makes it easier for application programs to execute an input-output operation.

* COBOL:

COBOL stands for Common Business Oriented Language.The US Department of Defense, in a conference, formed CODASYL (Conference on Data Systems Language) to develop a language for business data processing needs which is now known as COBOL.

COBOL is used for writing application programs and we cannot use it to write system software. The applications like those in defense domain, insurance domain, etc. which require huge data processing make extensive use of COBOL.

* JCL:

Job Control Language (JCL) is the command language of Multiple Virtual Storage (MVS), which is the commonly used Operating System in the IBM Mainframe computers. JCL identifies the program to be executed, the inputs that are required and location of the input/output and informs the Operating System through Job control Statements. In mainframe environment, programs can be executed in batch and online modes. JCL is used for submitting a program for execution in batch mode.

* CICS:

CICS stands for Customer Information Control System. CICS was developed in 1968 by IBM. CICS allows users to develop and execute online application in an MVS environment. CICS has become the most commonly used server for Internet applications. CICS is a transaction processing system which is also called as Online Transaction Processing (OLTP) Software. CICS is a data communication system that can support a network containing hundreds of terminals.

* DB2:

DB2 is a database product from IBM. It is a Relational Database Management System (RDBMS). DB2 is designed to store, analyze and retrieve the data efficiently. DB2 product is extended with the support of Object-Oriented features and non-relational structures with XML.

* BATCH PROCESSING MODE:

Batch processing is **the processing of transactions in a group or batch**. No user interaction is required once batch processing is underway. This differentiates batch processing from transaction processing, which involves processing transactions one at a time and requires user interaction.

* ONLINE PROCESSING MODE:

Online Processing is Transaction processing that **occurs interactively with the end user** is referred to as online transaction processing or OLTP. One of the main characteristics of a transaction system is that the interactions between the user and the system are very short.

* ENVIRONMENT:

The system will be developed in Z/OS system using COBOL, CICS, JCL and DB2 and would provide a console-based user-interface.

* Z/OS
* COBOL, JCL and VSAM
* APPLICATION DESCRIPTION:

E-Service Transport Portal is the helps the users to get learner license (LLR) online. One who completed 18 years, can apply for LLR through online. Online portal is self-guided and user can fill up all information required. It is proposed to develop a Portal for OLAS that will allow the Applicants to fill the online LLR application. The UI Design of this Application is structured in a way which can be easily accessed without any guidelines. It is also assumed that all aspects of this project has the ability to work together in the way the User is expecting. The User can also request for the status of Application he / she has submitted which will have detailed information like User’ Personal Detail along with Status of the Application. User Can Also Cancel his request for the Application that he has submitted. Overall Application Working and The UI Design will be User Friendly.

* APPLICATION FUNCTIONALITY:

Pre-Requisite:

* Age greater than or equal to 18.

Functions:

User can perform task like,

* Apply to New LLR
* Cancel User’s Application
* View User’s Application Status