

Final Transcript Clearance System

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Chapter 1

Final Transcript Clearance

Requirement Specification

Version 1.0

SOFTWARE REQUIREMENT SPECIFICATION

DOCUMENT INFORMATION

Category	Information
Customer	UMT
Project	Final Transcript Clearance
Document	Software Functional Specification
Version	1.0
Identifier	FTC_SFS_1.0
Status	Issued
Author	Farman Ali, Ahmad Ejaz, Muaz Asim
Approver(s)	Mr. Irfan ud Din
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SOFTWARE REQUIREMENET SPECIFICATION

MODIFICATION HISTORY

Version	Date	Who	Comment
V1.0.0		Ahamd, Farman, Muaz	Initial Version.

1.1 Introduction

1.1.1 Abstract

WFI (Work Flow Implementation) of FT (Final Transcript) is Web Based Application that aims to provide the automation of flow of work. The problem with the existing system is that the application form like Final Transcript Clearance form moves from desk to desk in a predetermined order in different departments. At each desk, a task is performed on the application form, until the application is finally approved. Each employee process the application without knowing the actual flow. Usually in an institute a document is approved or verified by different departments manually. Due to this manual flow of work, much more time consumes or waste. Secondly there is advance that form might get lost in a department and it is very difficult to trace the lost form. We are going to develop this Web Base Application for UMT that will facilitate the employees to work rapidly, effectively and automatically. The participant has to move from one department to another and the existing system of the clearance of FT is manual. So the rapidly increase in technology indulges us to develop such system that performs the task effectively and efficiently. To solve this problem we provide workflow for the application using open source work flow engine. Work flow processes provide the paperless processing of the request and approved by the employees that are designated at different places.

This product will be directly beneficial for the department employee and the participants. The manual flow of work will be transferred on the computer system and we will get redeem from that flow of work. The student or participant has no any directly involvement in term of using this product but it will be beneficial for them in case of FT clearance. The ASU employee will submit the request of FT clearance to different departments and these departments will feedback to ASU department. The other relevant department like PSD, PDnP, E-Lab, Book Bank (names of departments), Library will only receive the request and response to ASU (Academic Support Unit). ASU employee is capable of generating and forwarding of request but the other departments only receive the request and response back to ASU. Other departments can not generate the request but these departments only response back to ASU.

1.1.2 Purpose

The over all description and the development of this workflow application is that it will reduce the complexity and work will be performed automatically as well as improves efficiency, quality and satisfaction and also provide organizational structure of processes. Work Flow Management concerns with a fast evolving technology which is increasingly being exploited by businesses in different sectors. So our main purpose is that we have to produce such software that supports the automatic flow of work for UMT. The highlighted issues are the automatically passed the request or document desk to desk using the techniques of work flow.

1.1.3 Scope

WFI for FT provides the online forwarding of request or application that will be verified or approved from different departments and finally feedback to the ASU Employee. This web based application will facilitate to do work automatically. It will not only support the efficiency and the accuracy of the flow of work but also reduce the consumption of time. This Software Product will show the overall workflow. Work flow is the flow or progress of work done by a company, industry, department, or person or the rate at which such flow or progress takes place.

1.1.4 Definitions, Acronyms and Abbreviations

Items	Description
FT	Final Transcript
WFI	Workflow Implementation
ASU	Academic Support Unit
PSD	Participant Service Department
PDnP	Participant Development and Participation
E-Lab	Electronic Lab

Table 1.1: Abbreviations

1.1.5 Overview

The rest of the document describes the overall description, specific requirements in terms of functionality, usability reliability, performance and supportability design constraints, user interface and other supporting information.

For the convenience of the reader the whole document is divided into four major modules which are:

- Introduction
- General Description
- Specific Requirements
- Supporting Information

Then again these headings are partitioned into many different headings.

Introduction is further divide into abstract, purpose, Scope, definitions, acronyms, abbreviations, references and overview.

Specific Requirement is further divided into functionality, usability, performance, supportability, design constraints, applicable standard and etc.

1.2 General Description

WFI will allow to study, it is totally self contained and independent. It shows all the chain of processes of work involved in the flow manually. When a student submits Transcript Issuance Application to ASU then the designated person will forward this request to all relevant departments for the approval of Student's status. So after

checking the status individually from each department, ASU will be able to handover the FT.

1.2.1 Product Functions

- Maintain department employee's ID and password database.
- Solves security problems by role based user management.
- After submission of request, it shows the request pending details to ASU employee.
- Request submission is only allowed to ASU employee.
- Request retrieval is only allowed to all other departments except ASU.
- Must fetch the participant data from other database.
- It will provide the online help.
- Warning generation.
- Message generation

1.2.2 User Characteristics

Name	Work Description	Technical Expertise	Familiarity with Software
Head of PSD	Managing and Administrative authority.	Yes	Must familiar with window environment and internet.
Employee of PSD	Forward the request to all departments and feedback to the Participant.	Yes	Must familiar with window environment and internet.
Participant	Check the status from Web site.	No	Must familiar with window environment and internet.
Relevant Department Heads	1. Feed back after checking the status.	Yes	Must familiar with window environment and internet.

Table 1: User Characteristics

1.2.3 User objective

This section describes the set of objectives and requirement for the system from the user's perspective. It may include "WISH LIST" of desirable characteristics, along with more feasible solutions that are in line with the business objectives.

1.2.4 User Problem Statement

The main problem of this system is that the request rotates from desk to desk and the departments are situated at different places, even far from each other. Due to the manual system, the participant not only had to move from one department to another and get the assurance of his/her clearance, but also the employees have to face lot of difficulties because of their departmental work and the misplacement of request.

The problem of issuance of FT is the gigantic problem for both employees and participants. A participant has to get the clearance from each department for the issuance of FT. however; couple of days can be waste in this process even a week.

1.2.5 General constraints

- For User Name and Password (online) safety and security, we will use some encrypted algorithms
- This project will be developed using JAVA environment ,so it will require JAVA frame work on the systems
- The workflow server Enhydra Shark will be used for this flow.
- The hardware available for the development is much efficient
- If the power supply off or internet disconnected, then the recent submitted request will not be affected in case of any troubleshooting.

1.2.6 Intended Audience

UMT- Department

ASU Employees
PSD Employees
PD&P Employees
E-Lab Employees
Book Bank Employees
Library Employees

1.2.7 Assumptions and dependencies

- Works on Windows platform and Sun Solaris.

- SRS (Software Requirement Specification) can be changed according to the requirement of the customer.

1.3 Specific Requirements

1.3.1 Functionality

- Allow Employee to login and logoff.
- Allow ASU Employee submits the request over all detail.
- Allow other departments to check incoming request or pending requests.
- Allow ASU employee to update or modify the Request.
- Allow administrator to create, modify and delete the department profile and user profile.
- Warning generation in case of expected problem.

1.3.2 Usability

A lecture or couples of sessions are required.

1.3.3 Performance

The system will be very fast because of the following factors:
Response time for making web service will be high

Capacity (process a workflow model can handle)

1.3.4 License Requirement

No license is required.

1.3.5 Supportability

- Development using Object Oriented Programming standards.
- Development tool is JAVA environment (IDE and Tools).
- Code is modularized into logical distinct part .This makes application easy to be maintained.

1.3.6 Design Constraints

- Rational Rose and MS VISIO for designing the system.
- Rational Unified Process.
- ERWIN 3.5

1.3.7 Legal, Copyright and other notice

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1.4 Supporting Information

- Coding standards
- Class libraries
- Maintenance access
- Maintenance utilities
- Stored Procedures

1.5 Preliminary Schedule

The detail of each activity is described according to the schedule. The start date of each activity and end date is mentioned and the duration of work is described in this chart (Gantt chart). Gantt chart represents the over all activities according to the duration and a chart of duration is described in fig1.1.

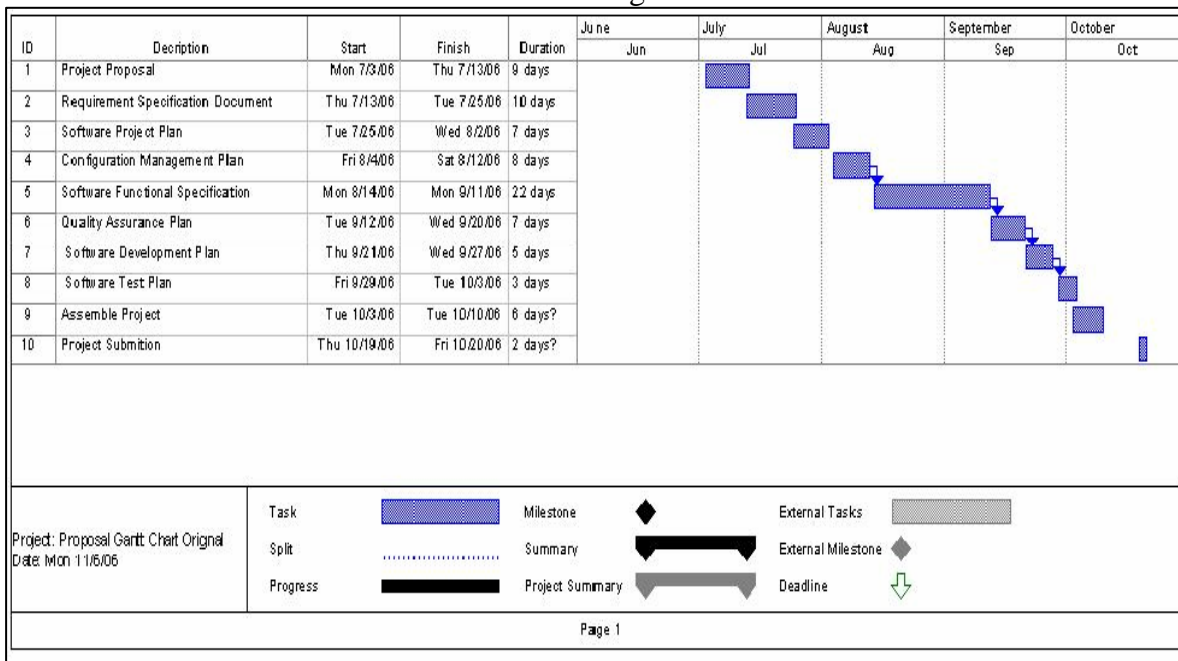


Fig.1.1: Gantt Chart

Chapter 2

Final Transcript Clearance

Software Project Plan

Version 1.0

SOFTWARE PROJECT PLANING

DOCUMENT INFORMATION

Category	Information
Customer	UMT
Project	Final Transcript Clearance
Document	Software Project Planning
Version	1.0
Identifier	FTC_1.0
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