





ANTICIPATORY VISA SYSTEM

Ву

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of

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A PROJECT REPORT

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BONAFIDE CERTIFICATE

Certified that this project report titled ANTICIPATORY VISA SYSTEM is the bonafide work of Mr. P.PADMANABAN (Reg No. 71203621032), who carried out the research under my supervision. Certified further, that to the best of my knowledge the work reported herein does not form part of any other project report or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

Project Guide

Head of Department

Submitted for the University Examination held on 29-06-2006

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May 24, 2006.

TO WHOMSOEVER IT MAY CONCERN

This is to certify that P Padmanaban is pursuing an internship with Accenture Services Pvt. Ltd.; the period of internship is from January 19, 2006 to July 19, 2006.

During this period, the intern has been working on a project entitled as "Anticipatory Visa System".

Till date, we found the intern's conduct satisfactory.

Yours Sincerely

Muthukumar Suruli India HR Services Centre,

Accenture Services Pvt. Ltd.

ABSTRACT

The project titled "ANTICIPATORY VISA SYSTEM" is designed to run as a web based intranet application and would primarily aim at maintaining all the nominations made for US anticipatory visa. This is believed to reduce the time involved in verification, reminders, monitoring and tracking of all the nominations for visa processing manually.

The major features of the AVS are that it allows the Managers to nominate resources for US Visa electronically. It allows the RMS and RMG members to process the application for Visa and maintain their stages. The AVS automatically generates mails for the employees, requesting them to upload the documents. It also notifies the RMS and RMG members when the employee's have uploaded the documents. It allows Super Administrators to assign Nominating members to processing groups. The application will be accessible only in the Intranet. AVS is designed only to process US anticipatory visas.

The AVS will be deployed on Windows 2003 Enterprise Edition. It will be accessed from Microsoft Windows XP Professional operating system with 512MB physical memory. The Application will be developed in .Net framework by making use of existing libraries. This would reduce the development cost, time and adhere to standards.

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LIST OF ABBREVIATIONS

Acronyms	Definitions
AVS	Anticipatory Visa System
RMG	Resource Management Group
RMS	Relocation Management Services
LDAP	Light weight Directory Access Protocol
DFD	Data Flow Diagram
us	United States of America
USCIS	US Citizenship and Immigration Services

CHAPTER 1

INTRODUCTION

1.1 Project Overview

Anticipatory Visa System is a web based intranet application that automates US Anticipatory Visa processing. This is believed to reduce the time involved in verification, reminders, monitoring and tracking of all the nominations for visa processing manually. The system would primarily aim at maintaining all the nominations for US anticipatory visas, update and track the nominations at various stages of the visa processing, upload of documents by employees and generate necessary reports.

This system will be completely web-based, linking to AVS and the intranet server from a standard web browser. An Intranet connection is necessary to access the system.

1.2 Project Scope

The Anticipatory Visa System includes the process of nominating the resources, uploading documents by resources, sending mails to employees and managers, badging the resources to the different stages of visa processing, recording the visa processing rates and generating reports.

The system does not interact with the Fragomen (application used by visa processing authorities in US) system. The process of submitting the documents into Fragomen has to be done manually. The system is designed only to process

CHAPTER 2

SYSTEM REQUIREMENTS AND SPECIFICATION

2.1 Technical Requirements

2.1.1 User Machine - Software Configuration

- Windows XP Professional.
- Microsoft Internet Explorer 6.0.

2.1.2 Web Server Machine - Software Configuration

- Windows 2003 Server Enterprise Edition.
- IIS 6.0.
- DOT NET Framework 1.1.
- IE Web Controls.
- Microsoft Excel.
- SQL Server 2000 Client.

2.1.3 Database Server Machine - Software Configuration

- Windows 2003 Server Enterprise Edition.
- SQL Server 2000.

2.1.4 User Machine - Hardware Configuration

- 512 MB RAM.
- Pentium 4, 2.8 G Hz.

2.2 Product Perspective

The AVS is a new system that is to replace the manual operation of the US Visa processing. It interacts with the LDAP Web Service system for the User Login.

2.3 Product Features

The major features that the AVS are that it allows the Managers to nominate resources for US Visa electronically. It allows the RMS and RMG members to process the application for visa and maintain their stages. The AVS automatically generates mails for the employees, requesting them to upload the documents. It also notifies the RMS and RMG members when the employee's have uploaded the documents. It allows Super Administrators to assign Nominating members to processing groups.

2.4 User Classes and Characteristics

The different users of the AVS system are:

- Nominating user
- Processing user
- Super Administrator
- Employee

2.5 Functional Requirements

2.5.1 Nominating User

The nominating user must be able to login to the AVS with User id and

2.5.1.1 Add Nomination

- The add nomination facility provides the flexibility to the nominate resources both in bulk and individually.
- Only Managers would be able to send the final nominations.
- Nomination will be accepted only after doing a background validation by HR.
- Once the nomination is done successfully through either of the options an auto generated confirmation mail is sent to the Manager/User.
- Once the background validation sheet is uploaded successfully the resources nominated would be badged as "Docs pending from employees".
- The system would then generate an auto mail to all those badged "Docs pending from employees".

2.5.2 Processing User

The processing user must be able to login to the AVS with User id and password. He must be able to process the nominated resources whose background verification has been completed.

2.5.2.1 Upload Resource List from Human Resources

- The resource management team formats the spreadsheet as per the specifications and uploads this document in the link "Docs Pending From Employees".
- This document has to be in the given format; else the system would reject the upload.

2.5.2.2 Verification of Documents

- The RMS will verify the documents for correctness.
- If documents are found incorrect a mail would be sent to the resource to reload the documents. Access to the upload feature will again be enabled to the employees.
- Once found correct RMS would send / submit the documents to Fragomen.
 This will be done at Documents Pending RMS stage and Interviews to be booked stage of the resource.
- Once the documents are forwarded to attorneys the resources would be badged as 'Docs forwarded to Attorneys' if they are in Documents Pending RMS stage otherwise the resources would be badged as Interviews scheduled.

2.5.2.3 Search / Update Resources

- The documents after verification by attorneys would be sent to USCIS.
- The RMS would mark those resources sent to USCIS as 'Docs forwarded to USCIS'.
- RMS will also specify the type of Visa processed for each of the nominations
- nominations.

 Once the petitions are received from attorneys, the resources would be
- badged as 'Petitions Received'.
 Resources would get an auto mailer requesting submission of TRA Form and Passport documents.
- Once the documents are uploaded successfully the resources will be

- After the interview dates are received by the RMS they would update the interview dates for the resources.
- Visa stamped and Visa received processes would be similar to the requirement as mentioned above. At each stage the resources would be marked with particular badge status respectively.

2.5.2.4 Generate Reports

- All necessary reports would be displayed at each of the badge stages. The user would be able to export the required reports at all stages of the visa process.
- Visa turn around time report would give the average lead time taken at each stage of processing for all resources.
- Anticipatory Visa Budget used report would give a quick heads-up of the entire cost used up so far (on any day) on visa nomination process.

2.5.3 Super Administrator

Super Admin role will be given to a member of the RMS team.

2.5.3.1 Assign Roles

Super Admin will have all the supervisory rights and in addition will be able to:

- Change the status of the nominations from any stage to a previous stage.
- Assign users of nominating groups to processing groups.
- The predefined roles in the system are:
 - Nominating user
 - Processing user

2.5.4 Employee

The Employees will be able to upload documents and check their Visa processing status.

2.5.4.1 Documents Upload

- The resources would upload the documents at the link mentioned in the auto generated mail.
- The system would allow documents upload only for those employees who are badged 'docs pending from employees'.
- Once docs have been uploaded successfully an auto mail to the resource confirming that his docs have been uploaded successfully will be sent.
- An auto mail would be sent to the RMS mailbox confirming the details of the resource whose has uploaded the docs and instructing RMS to verify the docs.
- The resource would get badged as Docs Pending with RMS.

2.5.4.2 Check Visa Status

This functionality will allow the employee's to check their Visa processing status.

CHAPTER 3

SYSTEM ANALYSIS AND DESIGN

3.1 Data Flow Diagram

The Data Flow Diagram records the various events and processes with in AVS. The DFD's provide function oriented view of the system.

Figure 3.1 Context Level DFD for AVS

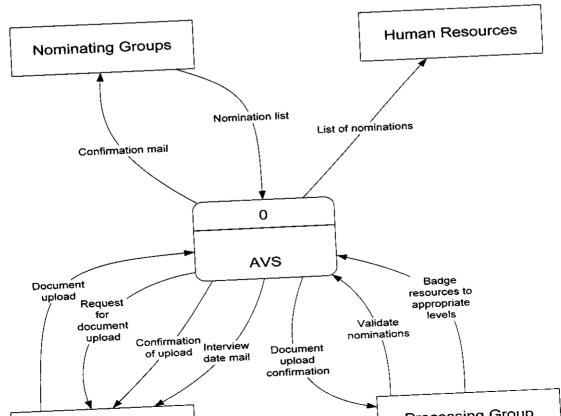
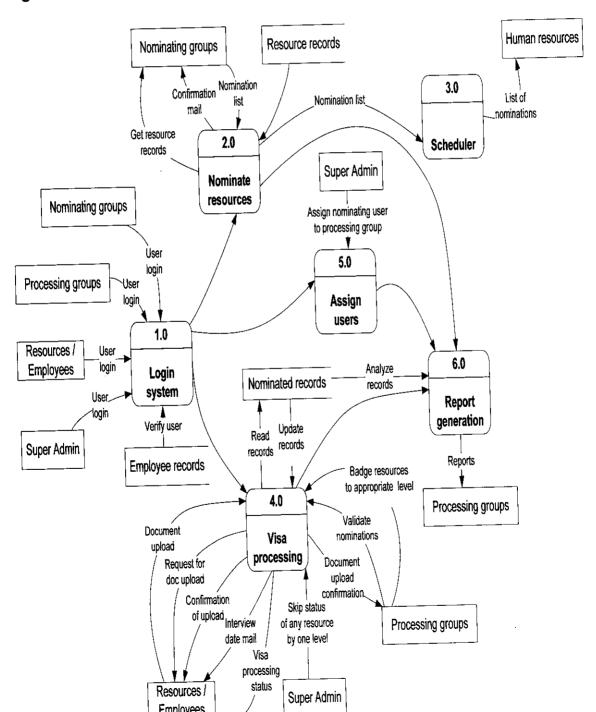


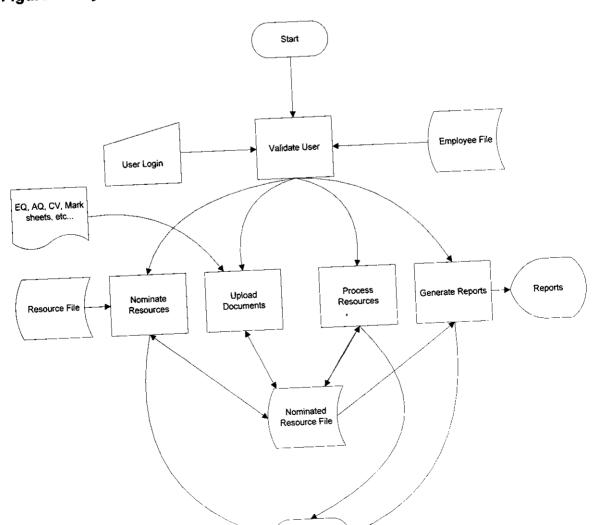
Figure 3.2 Level 1 DFD for AVS



3.2 System Flow Chart

The System Flow Charts are graphic illustrations of the physical flow of information through the entire system. A system flow chart shows high level view of the organization of a system. Flow lines represent the sequences of processes, and other symbols represent the inputs and outputs to a process.

Figure 3.3 System Flowchart for AVS



3.3 Database Design

Database design involves deciding which tables to create, what columns they will contain, as well as the relationships between the tables. The benefits of a good database design are:

- Data entry, updates and deletions will be efficient.
- Data retrieval, summarization and reporting will also be efficient.
- Changes to database schema are easy to make

Normalization is the process of simplifying the design of a database so that it achieves the optimum structure. Normalization theory gives us the concept of normal forms to assist in achieving the optimum structure. The normal forms are a linear progression of rules that you apply to your database, with each higher normal form achieving a better, more efficient design. The normal forms are:

- First Normal Form
- Second Normal Form
- Third Normal Form

3.3.1 Table Structure

Table 3.1 Application Links

		Table : APPLINKS		
Primary	Column Name	Data Type	Length	Allow Nulls
V V	AL ID	bigint	8	
	AL DESC	APP COMMENTS (varchar)	500	Y
	AL_DEGO	APP_MASTER_NAME (varchar)	100	
	AL GRP_NO	APP NOS (int)	4	Y
	AL GRP_NAME	APP MASTER NAME (varchar)	100	Y_
	AL_GRP_NAME	char	1	Y

Table 3.2 Application Role Links

		Table : APPROLELINKS		
Primary	Column Name	Data Type	Length	Allow Nulls
\ \	ARL AR_ID	bigint	8	
	ARL AL ID	bigint	8	
	ARL GRP_ID	bigint	8	
	ARL VIEW_YN	APP_YN (char)	1	

Table 3.3 Application Roles

		Table : APPROLES	· · ·	Allow
Primary	Column Name	Data Type	Length	Nulls
V V	AR ID	bigint	8	
<u>'</u>	AR NAME	APP MASTER_NAME (varchar)	100	
<u> </u>	AR COMMENT	APP COMMENTS (varchar)	500	Υ
	AR ACTIVEYN	APP_YN (char)	1	

Table 3.4 Application Users

	Table : APPUSER				
Primary	Column Name	Data Type	Length	Allow Nulls	
Y	AU ID	bigint	8		
	AU USER_NAME	APP MASTER_NAME (varchar)	100		
	AU PERSONNEL_NO	varchar	50		
	AU_RS_PWD	varchar	50	Y_	
	AU EMAIL_ID	varchar	100		
	AU USER TYPE	bigint	8	Y	
	AU_DEFAULT_PAGE	varchar	200		
	AU ACTIVEYN	APP YN (char)	1		
	AU AEN ID	int	4	Υ	
_	AU DOCUMENTYN	APP YN (char)	1	Y_	

Table 3.5 Application User Roles

	,	Table : APPUSERROLES		
Deimons	Column Name	Data Type	Length	Allow Nulls
Primary	AUR AR ID	bigint	8	
	AUD VIEW VN	APP YN (char)	1	

Table 3.6 Employee Nomination

-	Table : AVS_EN	IP_NOMINATION		Allow
	a la Nama	Data Type	Length	Nulls
Primary	Column Name	_ _	8	
Υ	AEN_ID	nt APP_MASTER_NAME	 	
	1	(varchar)	100	
	AEN_EMP_FNAME	APP_MASTER_NAME		_
	1	(varchar)	100	
	AEN_EMF_NO	<u>, </u>	9	Υ
	AEN_COST_OCCURED	APP_AMOUNT (numeric) APP_MASTER_NAME	 	
		(varchar)	100	
	AEN_DU_NO	APP_MASTER_NAME		
		(varchar)	100	Υ
	AEN_EMP_MNAME	APP_MASTER_NAME		
	1	(varchar)	100	
	AEN_EMP_LNAME	APP MASTER_NAME		Ì
	AEN OG	(vorobar)	100	<u> </u>
	AEN_OG	APP_MASTER_NAME	400	
I	AEN CAPABILITY		100	<u> </u>
} -	ALIVOVOTALI	(varchar) APP_MASTER_NAME	100	
	AEN_LEVEL	(varchar)		┼──
		APP_YN (char)	1	↓
 	AEN_ACTIVEYN	APP_MASTER_NAME		
	AEN_CLIENT	(varchar)	100	
<u> </u>		bigint	8	<u> </u>
	AEN_ASM_ID	APP_MASTER_NAME		
	ACM PROJECT	(varchar)	100	
	AEN_PROJECT		4	. Y
L	AEN_AVT_ID	int	100	
	AEN_EMAIL	varchar		
	AEN DOJ	APP_DATETIME (datetime)	8	3
<u> </u>		bigint	} {	3
	AEN_RS_ID	APP MASTER_NAME		
	A THE DEMANDACION I	(varchar)	10)
	AEN_PRIMARYSKILL	APP MASTER_NAME	-	
	AEN LOCATION	(varchar)	10	U
	AEN LOCATION	APP_MASTER_NAME	1	_
\	AEN AG	(varchar)	10	<u> </u>
— —		APP_MASTER_NAME	10	n
	AEN_NOMINATING_AUTHORITY	(varchar)		
-		bigint		8
	AEN_OP_ID	ADD VAL(chor)		1 \

	Table : AVS	EMP_VISA_DOCS		Allow
		Deta Tuna	Length	Nulls
Primary	Column Name	Data Type	8	
V	AEVD_ID	bigint	8	
	AEVD_ADM_ID	bigint	4	
	AEVD_AEN_ID	int APP_MASTER_NAME	100	
	AVED_DOC_NAME	(varchar) APP_COMMENTS (varchar)	500	Y
	AVED DOC DESCRIPTION		8	Y
· · · · ·	AVED DOC DESCRIPTION AVED DOC SUBMITED DATE		8	_

	Table : AVS_EMP_INTE	RVIEW DATES		Allow
		Data Type	Length	Nulls
Primary	Column Name		8	
Υ	AEID_ID	bigint	4	_ Y
	AEID_AEN_ID	int APP_DATETIME	8	Y
	AEID_INTERVIEW_DATE	(datetime) APP_MASTER_NAME	l	Y
	AEID_INTERVIEW_LOCATION	(varchar)	100	Y
	AEID INTERVIEW TIME AEID INTERVIEW REJECT REASON	varchar APP_COMMENTS (varchar)	500	Y

Table 3.9 Visa Stage Dates							
	Table : AVS_	EMP_VISA_STAGE_DATES	T T	Allow			
\ -			Length	Nulls			
Primary	Column Name	Data Type	8				
V	AVD_ID	bigint (datetime)	8				
	AVD_START_DATE	APP_DATETIME (datetime)	8	Y			
 	AVD_END_DATE	APP_DATETIME (datetime)	4				
	AVD_RS_ID	int	8				
	AVD_ASM_ID	bigint	8				
\	AVD ASU ID	bigint					

Table 3.10 Mail Configuration

-	Tabl	e : AVS_MAIL_CONFIG		
_		Data Type	Length	Allow Nulls
Primary	Column Name		8	
Υ	AMC_ID	bigint	100	
	AMC_FROM	varchar		
	AMC_CC	varchar	500	
	AMC BCC	varchar	500	Y
	AMC_BOO	varchar	20	
	AMC FLAG	char	1	
	AMC TYPE	APP MASTER NAME (varchar)	100	
		varchar	100	<u> Y</u>
	AMC_TO	APP COMMENTS (varchar)	500	Y
	AMC_DESCRIPTION		100	Y
	AMC_TYPE_NAME	APP_MASTER_NAME (varchar)		·
	AMC_MAX_DB_SIZE_KB	bigint	8	<u></u>

Table 3.11 Mail Remainder

	Та	ble: AVS_MAIL_REMAINDER		
		Data Type	Length	Allow Nulls
Primary	Column Name	bigint	8	
	AMR_ID AMR_AEN_ID	int	4	Y
	AMR_AEN_ID	bigint	8	Y
	AMR COUNT	numeric	9	Y

Table 3.12 Visa Details

	Table :	AVS_VISA_DETAILS		
Deimoni	Column Name	Data Type	Length	Allow Nulls
Primary	AVD ID	bigint	8	
<u> </u>	AVD AEN ID	int	4	Y_
	AVD AUT_ID	int	4	Y
	AVD_AVI_ID AVD_VALID_FROM_DATE	APP DATETIME (datetime)	8	Y_
	AVD_VALID_FROM_DATE	APP_DATETIME (datetime)	8	Y
		varchar	50	Y_
	AVD_VISA_NO AVD_AEN_APP_KEY	varchar	200	Y

	Table : AV	S_VISA_RATES_MASTER	T	Allow
 -			Length	Nulls
Primary	Column Name	Data Type	8	
Υ	AVR_ID	bigint APP_AMOUNT (numeric)	9	
	AVR_RATE		1	
	AVR_ACTIVEYN	APP_YN(char)	4	
	AVR AVT ID	int (detetime)	8	Y
	AVR_EFFECTIVE_DATE	APP_DATETIME (datetime)	8	Y
	AVR_ASM_ID	bigint		

Table 3.14 Visa Type

Table 3.	14 Visa Type 	TOP MACTED		
	Table : A	VS_VISA_TYPE_MASTER	Length	Allow Nulls
Primary	Column Name AVT_ID AVT_TYPE AVT_DESCRIPTION	Data Type int APP MASTER NAME (varchar) APP COMMENTS (varchar) APP YN(char)	4 100 500	Y
	AVT_ACTIVEYN	All		

Table 3.15 Documents Master

	Table : AVS_DOC_MASTER	Γ	Allow
Primary Column Name Y ADM_ID ADM_NAME ADM_DESCRIPTION ADM_ACTIVEYN ADM_DOC_TYPE	Data Type bigint APP MASTER NAME (varchar)	8 100 500 1 4	Nulls Y

Table 3.16 Stage Master

Table 3.	16 Stage Master	THE MACTER		
	Table	: AVS_STAGE_MASTER		Allow
		D. J. Time	Length	Nulls
Primary	Column Name	Data Type	8	
Y	ASM_ID	bigint APP MASTER NAME (varchar)	100	
 	ASM_STAGE	APP_COMMENTS (varchar)	500	Y
	ASM_DESCRIPTION		1	
	ASM_ACTIVEYN	APP_YN(char)		· -

Table 3.17 Status Master

	Tabl	e:AVS_STATUS_MASTER	 	Allow
Daime one	Column Name	Data Type	Length	Nulls
Primary		bigint	8	
<u> </u>	ASU_ID	APP MASTER_NAME (varchar)	100	
	ASU_STATUS	APP COMMENTS (varchar)	500	Y
	ASU_DESCRIPTION		1	
	ASU_ACTIVEYN	APP_YN(char)	⊥ ————	

3.4 User Interface Design

User experience and interface design in the context of creating software represents an approach that puts the user, rather than the system, at the center of the process. This philosophy, called user-centered design, incorporates user concerns and advocacy from the beginning of the design process and dictates the needs of the user should be foremost in any design decisions.

The most important thing is to ensure that the user interface works consistently. The buttons are placed in consistent places on all the windows, the same wording in labels and messages are used, a consistent color scheme is used throughout. This consistency is achieved by using Cascading Style sheets. Consistency in user interface enables users to build an accurate mental model of the way it works, and accurate mental models lead to lower training and support costs.

CHAPTER 4

TESTING

4.1 Unit Testing

Unit testing validates that a particular module of source code is working properly. It shows that isolates each part of program and shows that the individual parts are correct. The unit testing was done on all the modules of the AVS system with different possible inputs.

4.2 Integration Testing

During integration testing the individual software modules are combined and tested as a group. It verifies functional, performance and reliability requirements of the system. The integration testing was applied on unit tested modules of the AVS system by grouping the related modules.

4.3 User Acceptance Testing

The AVS system was tested in the real world by its intended audience. User acceptance testing ensures that the system actually meet the business requirements, works properly and truly helps them do their job efficiently and effectively. The different types of users were involved in this phase of the testing.

Table 4.1 Test Case for Docs Pending Employee

creen :Docs Pe			nding Employe	Actor :RMS	& RMG		
	עדו	Test Case	- 4-4 Output	Test Cyc	le 1	Test Cyc	cle 2
Sr No	iΤ	Script/Input Steps	Expected Output	Actual Output	Pass/ Fail	Actual Output	Pass/ Fail
Documents Pending - Employee_01	ŪΤ	user having	The user should be able to login into the system and Upload the Excel sheet from the HR. Documents Pending - Employee screen should be made available to the user.	As expected	Pass	As expected	Pass
Documents Pending - Employee_02	UT	Login as a user having the role of a "Super Admin" with valid User ID and Password.	The user should be able to login into the system and Upload the Excel sheet from the HR. Documents Pending - Employee screen should be made available to the user.	As expected	Pass	As expected	Pass
Documents Pending - Employee_03	- UT	Login as a user not having the role of a "Processing user" or "Supe Admin" with valid User ID and Password	ır \	As expected	Pass	s As expected	i l
Documents Pending - Employee_(1	Try to enter the Upload Resource screen by typing the UF of this page directly without entering the	to enter into the system without entering into the login page.	r munch	tail url.	As expecte	Pas

ı	Documents Pending - Employee_05	UT !	Click on "Visa Status\ Documents Pending - Employee" Link from the tree node.	Documents Pending - Employee screen should be displayed with a 1.)Text box for entering the file name 2.)Two buttons to Browse and Upload 3.)Notes to the user	As expected	Pass	As expected	Pass
- - - - - -	Documents Pending - Employee_06	UT	Click Browse button	A pop up window should be opened where the user can search and choose a file.	As expected	Pass	As expected	Pass
	Documents Pending - Employee_07	υT	Click Browse button to select a document or file other than .xls format and click Upload.	The system should display an error message "File Name should be EmployeeList.xls"	As expected	Pass	As expected	Pass
	Documents Pending - Employee_08	UT	Click Browse button to select a document or file other than EmployeeList.x Is and click Upload.	The system should display an error message "File Name should be EmployeeList.xls"	As expected	Pass	As expected	Pass
	Documents Pending - Employee_09	UT	Click Browse and select an excel sheet with columns arranged in correct order specified with file name EmployeeList.x Is and click Upload.	1.) The file should be successfully uploaded in the form of excel sheet. 2.) The uploaded status reports are displayed in a data grid along with Error Status and Comments (reason for the failure).	As expected	Pass	As expected	Pass
	Documents Pending - Employee_10	UT	Click Browse and select an excel sheet with columns deleted and click Upload.	The system should display an error message "Column name Employee ID was not found" if the Employee ID column was	As expected	Pass	As expected	Pass

Documents Pending - Employee_11 Documents Pending - Employee_12	UT	Click upload without choosing any file, leaving the text field blank. Upload the file EmployeeList. xls without entering data and leaving it	The system should display an error message "File Name should be EmployeeList.xls" An error message "No Records Found " should pop up.	As expected As expected	Pass	As expected As expected	Pass
Documents Pending - Employee_13	UT	blank. Upload the file EmployeeList. xls by entering data of an employee who has not been nominated.	An error message "No Records Found" should pop up.	As expected	Pass	As expected	Pass
Documents Pending - Employee_14	UT		error message "Please upload the document again as some of the records that were uploaded were not correct". 2.) The uploaded	a	fail	As expected	Pass
Documents Pending - Employee_	ł	JT Click Browse and select ar EmployeeLis Is with resources already submitted.	upload only the	,		As expected	Pass

Documents Pending - Employee_16	UΤ	header on the	The details should be sorted based on the corresponding header data.	As expected	Pass	As expected	Pass
Documents Pending - Employee_17	UT	Click on submit button after uploading the EmployeeList.x Is file.	1.) The resources should be badged to Documents Pending Employee and should be removed from Nominated badge. 2.) The message "Mail sent successfully" should pop up. 3.) The confirmation mail should be sent to the resource.	As expected	Pass	As expected	Pass
Documents Pending - Employee_18	UT	Try to submit the resources name even if there is a single erroneous item in the list.	The system should not allow the rest of the resources to be submitted	resources		As expected	Pass
Documents Pending - Employee_19	IT	Try to submit the same resource name who has cleared the background verification twice.	The system should not accept the employee name again. And an error message "No records found" should be displayed	Able to submit the resources		As expected	Pass

Table 4.2 Test Case for Search - Update

Screen :Search/Update

Actor :RMS & RMG

Sr No	UT/	Test Case Script/Input	Expected Output	Test Cycle 1		Test Cycle	<u>2 </u>
_1 =		Steps		Actual Output	Pass/ Fail		
Search/ Update_01	UT	having the role of	The user should be able to login into the system and Search/Update screen should be made available to the user.	As expected	Pass	As expected	Pass
Search/ Update_02	UT	Login as a user having the role of a "Super Admin" with valid Enterprise ID and Password.	The user should be able to login into the system and Search/Update screen should be made available to the user.	As expected	Pass	As expected	Pass
Search/ Update_03	UT	Login as a user not having the role of a "Processing user" or "Super Admin" with valid Enterprise ID and Password.	The user should not be able to access this page.	As expected	Pass	As expected	Pass
Search/ Update_04	ŪT	Try to enter the Search/Update screen by typing the URL of this page directly without entering the Login Page.	The system should not allow the user to enter into the system without entering into the login page.	As expected	Pass	As expected	Pass

Search/ Update_05		Status \ Search/Update" Link from the tree node.	Search/Update screen should be displayed with a 1.)Controls for DU #, Capability, Emp Name, Emp ID, Operating Group, & Stage must be available based on which the search for resources can be made. 2.) Two buttons to Search and Clear the resources based on the types selected in the above controls. 3.) A button to submit the chosen resources for next stage.	As expected	Pass	As expected	Pass
Search/ Update_06	UT	Edit in the DU # and Capability controls.	1.) The user must not be able to edit in these controls. 2.) It must be disabled and data can be entered only by selecting the search icon next to the control. 3.) Data can be deleted only by selecting the eraser icon.		Pass	As expected	
Search/ Update_07	UT	Click on the Operation Groups Drop down list combo box.	It should show all the Operation Groups available.	As expected	Pass	As expected	Pass
Search/ Update_08	UT	Click on the Stage Drop down list Combo box.	It should display only the following stages: Forwarded to attorneys Forwarded to USCIS Petitions Received Visa Stamped Visa Received	As expected	Pass	As expected	Pass



Search/ Update_09	UT	Click Search button.	the search criteria in a grid. 2.)The grid must have the resource details including the current stage of the resource and 3 Radio Buttons namely Pending, Approved, and Reject that indicates the status	As expected	Pass	As expected	Pass
Search/ Update_10	UT	Click Clear button.	of a resource The system should remove the grid displaying the resource details.	As expected	Pass	As expected	Pass
Search/ Update_11	UT	Change the status of a resource at Forwarded to attorneys stage and click Submit button.	1.) The resource should initially be marked as Pending when the resource enters the Forwarded to attorneys stage. 2.) The resources status can either be set to Approved or Reject but can not be set to Pending again once approved or rejected. 3.) If the resource is set to Approved and Submit button is clicked the resource must be badged to Forwarded to USCIS stage. 4.) If the resource is set to Reject an Submit button is clicked the resource stays in Forwarded to attorneys stage.		Pass	As expected	
Search/	1	UT Change the status of a	The resource should initially be	As expecte	Pa ed	ss As expecte	Pass
Update_	12	resource at Forwarded to	marked as Pendi	ng			

Search/ Update_13	UT		status can either be set to Approved or Reject but can not be set to Pending again once approved or rejected. 3.) The Visa Type Combo box will be displayed. 4.) If the resource is set to Approved and Submit button is clicked it must ensure that the Visa Type is chosen, if so the resource must be badged to Petitions Received stage. 5.) If the resource is set to Reject and Submit button is clicked the resource stays in Forwarded to USCIS stage. 1.) The resource should initially be marked as Pending when the resource enters the Petitions Received stage. 2.) The resources status can either be set to Approved or Reject but can not be set to Pending again once set to approved or rejected. 3.) If the resource is set to Approved and Submit button is clicked resource stays in Forwarded to Ending again once set to approved or Reject but can not be set to Pending again once set to approved and Submit button is clicked resource stays in Petitions Received stage and a mail requesting the submission of the TRA Form and Passport documents must be sent to the	As expected	Pass	As expected	Pass	
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		C F I	Submit button is clicked the resource stays in Forwarded to USCIS stage. 5.) The resources status can be set to Reject from Approved.				Pass
Search/ Update_14	UT	status of an employee who	He should be moved to Interviews to be booked stage	As expected	Pass	As expected	Pass
Search/ Update_15	UT	Try to see the status of an employee who has been approved in petitions received stage but whose documents has been rejected by RMS.	He should be in pending status in Petitions Receive Stage. He will receive a mail to reupload the documents.	As expected	Pass	As expected	
Search/ Update_16	UT	Try to see the status of an employee who has been approved in petitions received stage and whose documents has been accepted by RMS.	He should be moved to Interviews to be scheduled stage.	As expected	Pass	As expected	Pass
Search/ Update_17	İΪ	Try to accept a person in Petitions Received Stage and then reject him.	The system shouldn't allow a rejection after accepting.	System is allowing	fail	As expected	Pass

Search/ Update_18	UT	Move a resource to Forwarded to USCIS stage with "Not Identified" as the visa type.	The system should give the error message "Select a Visa type"	Resource is allowed to be moved to Forwarded to USCIS with out selecting a visa type.	Fail	As expected	Pass
Search/ Update_20	UT	Move a resource to Forwarded to USCIS stage from Forwarded to Attorneys stage whose visa type has been identified at nomination stage.	The resource should be batched to Forwarded to USCIS with same visa type.	Visa type is reset to not identified for the resources whose visa type have been identified at the Nominatio n stage	Fail	As expected	Pass
Search/ Update_21	UT	Reject and Approve resources at Petitions Received, Visa Stamped and Visa Received stages.	The resource should be batched to the next stage.	System crashes when the resources are approved in the 'Petitions received' Stage.	Fail	As expected	Pass

CHAPTER 5

CONCLUSION AND FUTURE ENHANCEMENT

5.1 Conclusion

The Anticipatory Visa System has been implemented successfully and the system is found to be working as expected. The AVS has simplified the management of visa processing and reduced the time involved in verification, remainders, monitoring and tracking of all the nominations made for the US anticipatory visa.

The AVS has also simplified the document submission by the resources and it has also allowed him to check the status of his visa at ease.

The AVS also provides stage wise reports, cost budget report and lag report that helps the management plan for the future nominations.

5.2 Future Enhancement

There are few other features that could be added to the AVS system such as the interaction of AVS and the Fragomen systems. This would allow the processing user to upload the documents submitted by the resources in to Fragomen. Some more reports such as Document defaulters report could be

generated to help the management.

The AVS system was designed with these considerations in mind so it provides a good scope for the future enhancements.

APPENDIX 1

SCREEN SHOTS

Figure A.1 Login for AVS

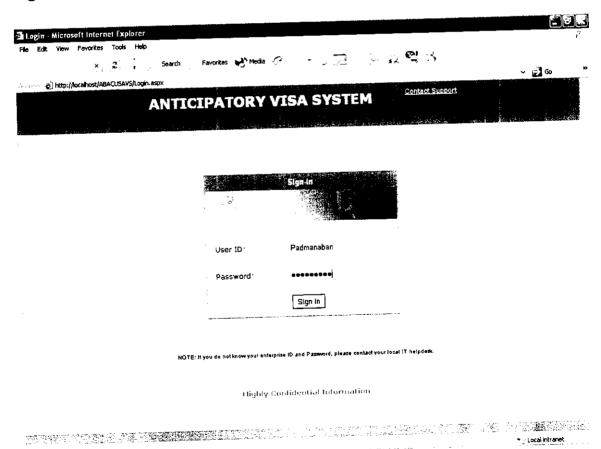


Figure A.2 Nomination for AVS

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Figure A.3 Choose Capability for AVS

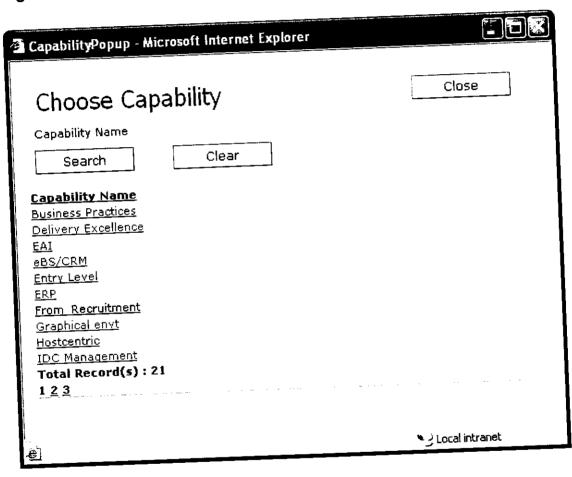


Figure A.4 Check Visa Status in AVS

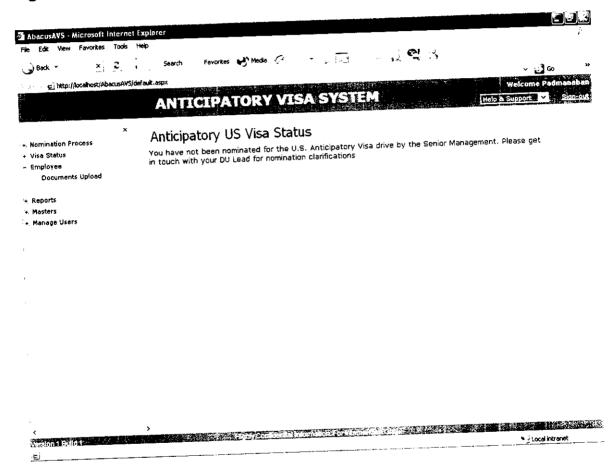


Figure A.5 Add User for AVS

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Figure A.6 Search User in AVS

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Figure A.7 Visa Processing Rates for AVS

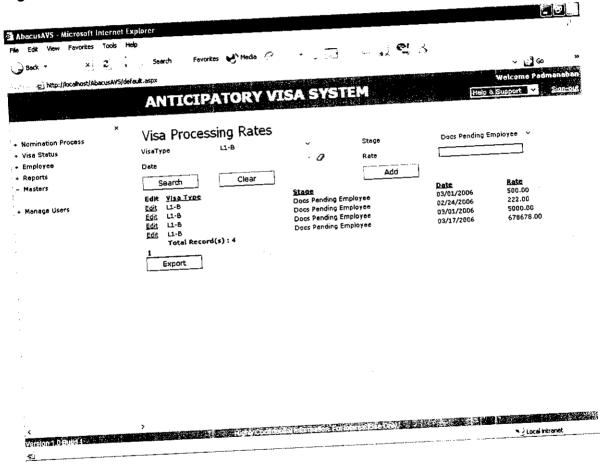


Figure A.8 Visa Popup

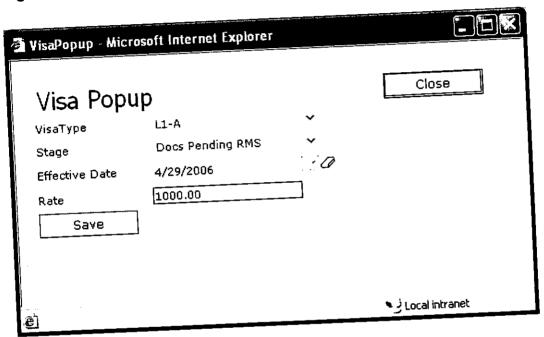


Figure A.9 Documents Pending Employees

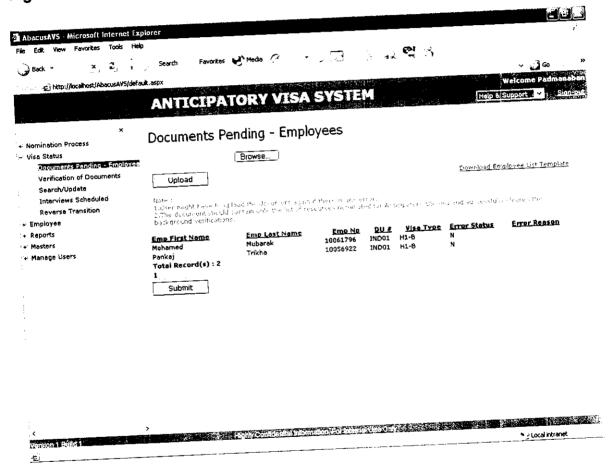


Figure A.10 Search/Update for AVS

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Figure A.11 Documents Upload for AVS

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Figure A.12 Documents Verification in AVS

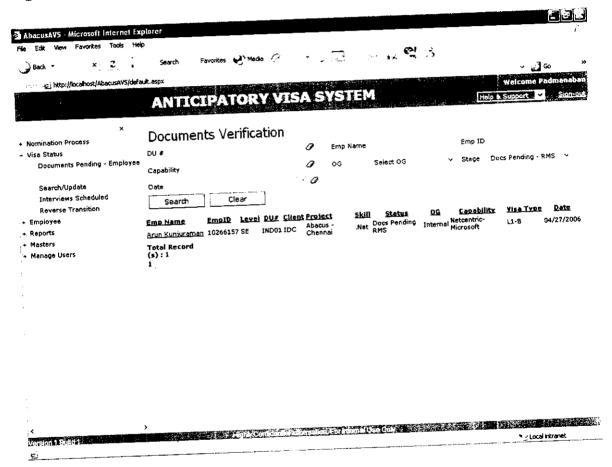


Figure A.13 Documents Verification Popup

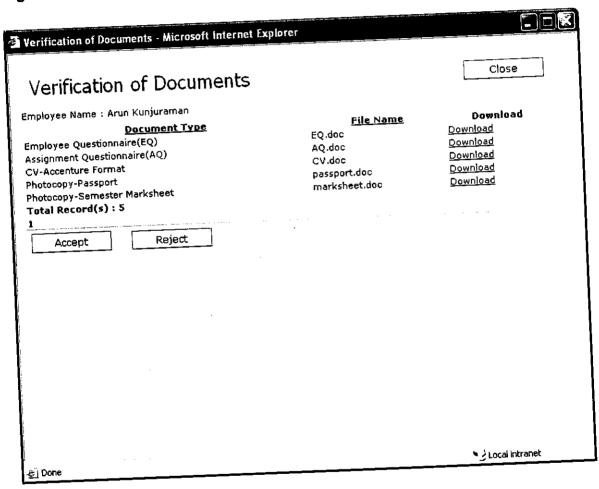


Figure A.14 Interviews Scheduled

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Figure A.15 Reverse Transition

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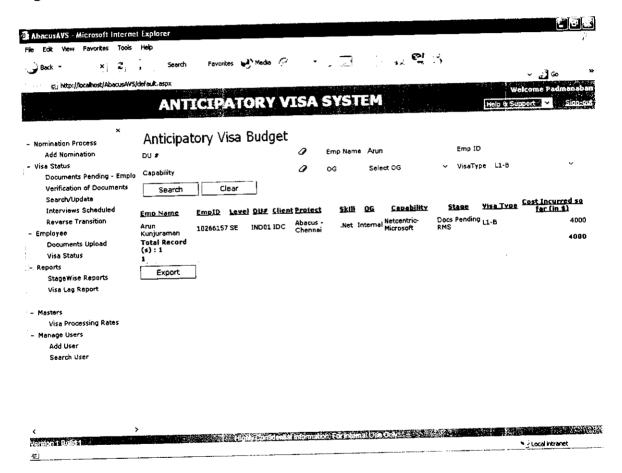
Figure A.16 Stage Wise Report

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Figure A.17 Visa Lag Report

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Figure A.18 Anticipatory Visa Budget



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