

CHAPTER 5

SYSTEM IMPLEMENTATION

5.1 System Specification

5.1.1 Hardware

This thesis process is done with several computers and server. In order to complete the entire process, including thesis writing, application design and analysis, program writing, and testing, the author done the process in author's home desktop computer, ABC Organization's computer, and ABC Organization's server.

Desktop Computer:

- Processor: Intel (R) Core (TM)2 Duo CPU 2.00 GHz
- RAM: 2 GB
- OS: Windows Vista Home Basic SP 1

ABC Organization's computer:

- Processor: (R) Core (TM)2 Duo CPU 2.00 GHz
- RAM: 2GB
- OS: Windows XP SP 2

5.1.2 Software

The implementation and testing phases are done using several supporting software, both from author's home desktop computer and ABC Organization's

computer. This is the list of software package used to complete the entire application:

- Windows XP, Home Edition, 32 bit
- Microsoft Visual Studio 2008
- Microsoft SQL Server 2005
- Internet Information Service (IIS)

5.2 Operational Procedures

In order to make sure that the application will run correctly, testing was done to this application. For testing step, the application was tested by HRO, HR Officer, and Related Section. Each of these section tested the application based on their pages. HRO tested on HRO pages, HR Officer tested on HR Officer pages, and Related Section tested on Related Section pages.

5.3 Implementation Strategy

This HR application is implemented mainly using ASP.NET, which is done using Microsoft Visual Studio 2008. In order to store and retrieve the data needed, all data stored in the database. Microsoft SQL server is being used as the database and connected with the application. This application also being tested using another kind of browsers, such as Internet Explorer 7, Internet Explorer 8, and Mozilla Firefox. Each browser has its own programming capability, which resulted to the screen layout that will be slightly different.

5.4 Sample Screenshot

These are the sample screenshot of the HR application that has been done based on the user interface design in Chapter 4:

I. Main Page:

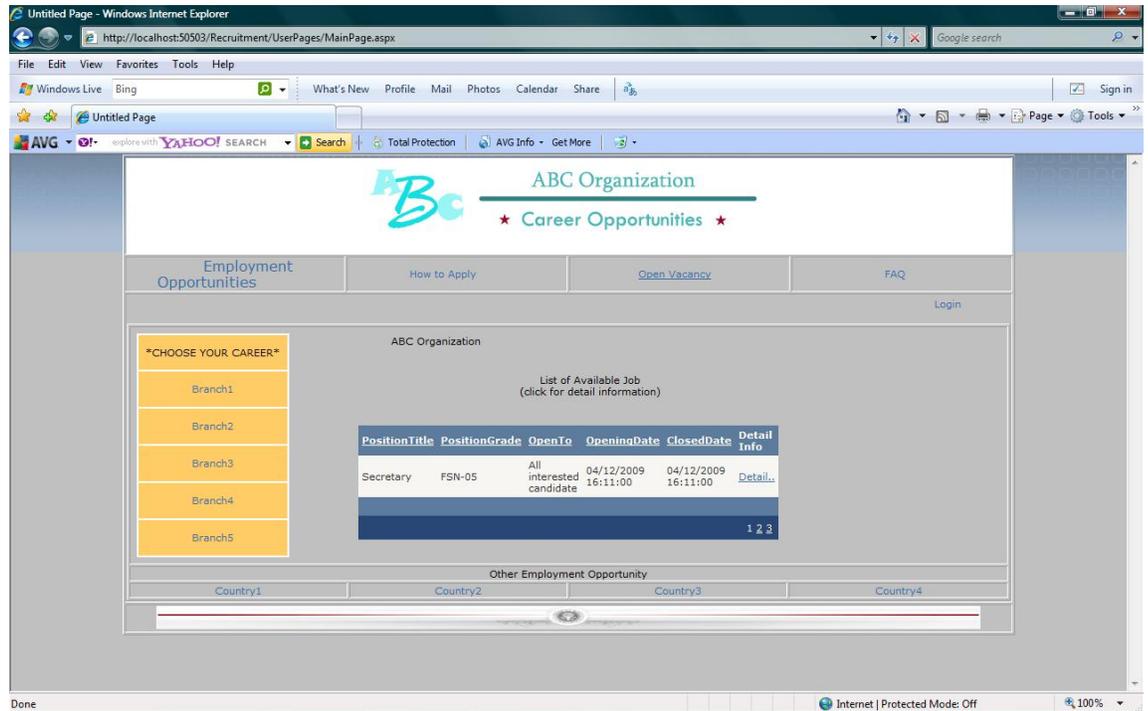


Figure 37 Main Page Sample Screenshot

II. Applicants Pages:

- Home Page:

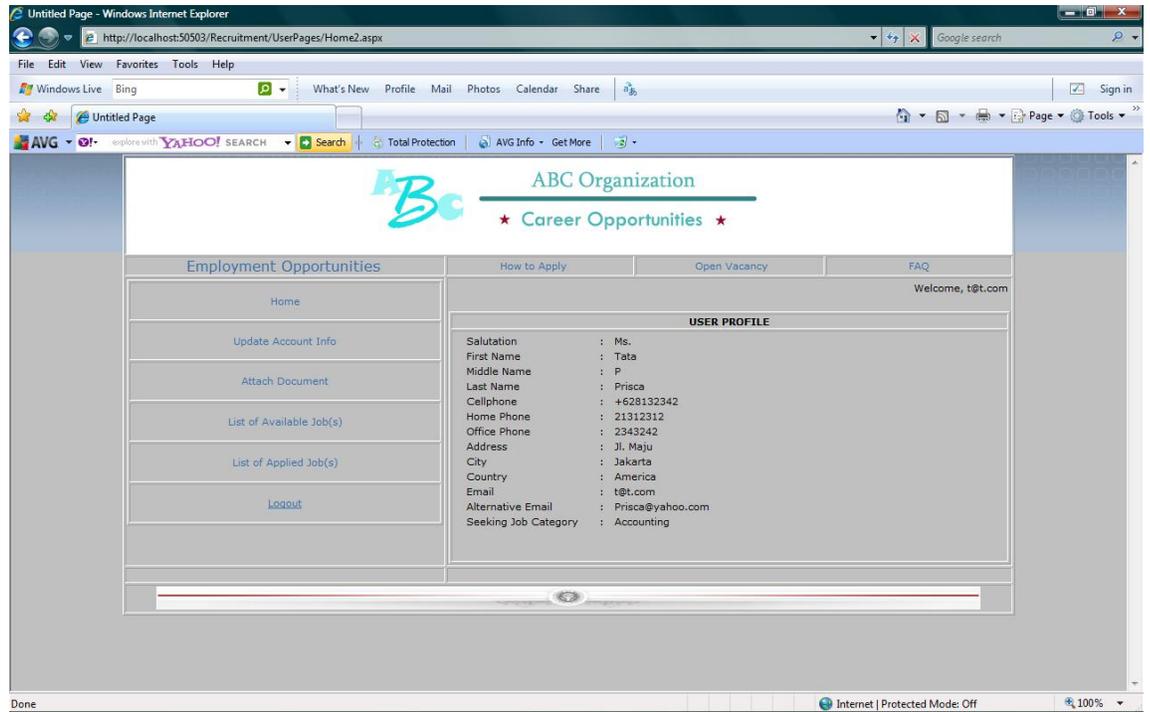


Figure 38 Home Page Sample Screenshot

- View List of Available Job:

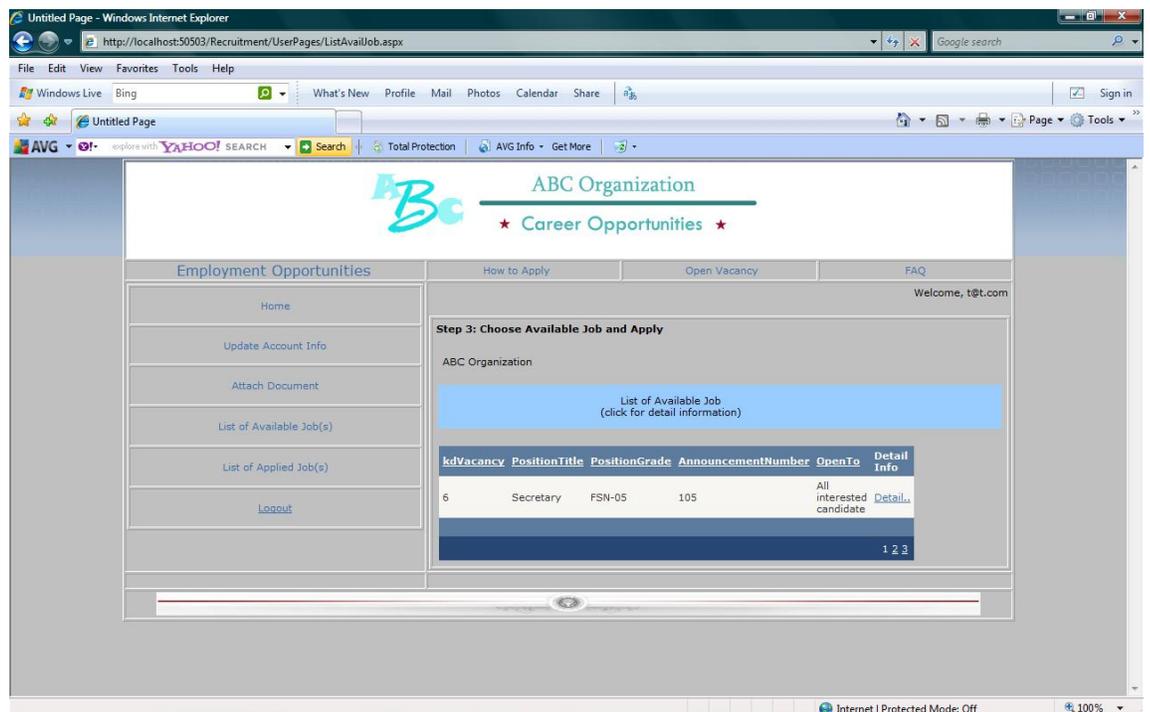


Figure 39 View List of Available Job Sample Screenshot

III. HRO Pages:

- Create Vacancy Announcement:

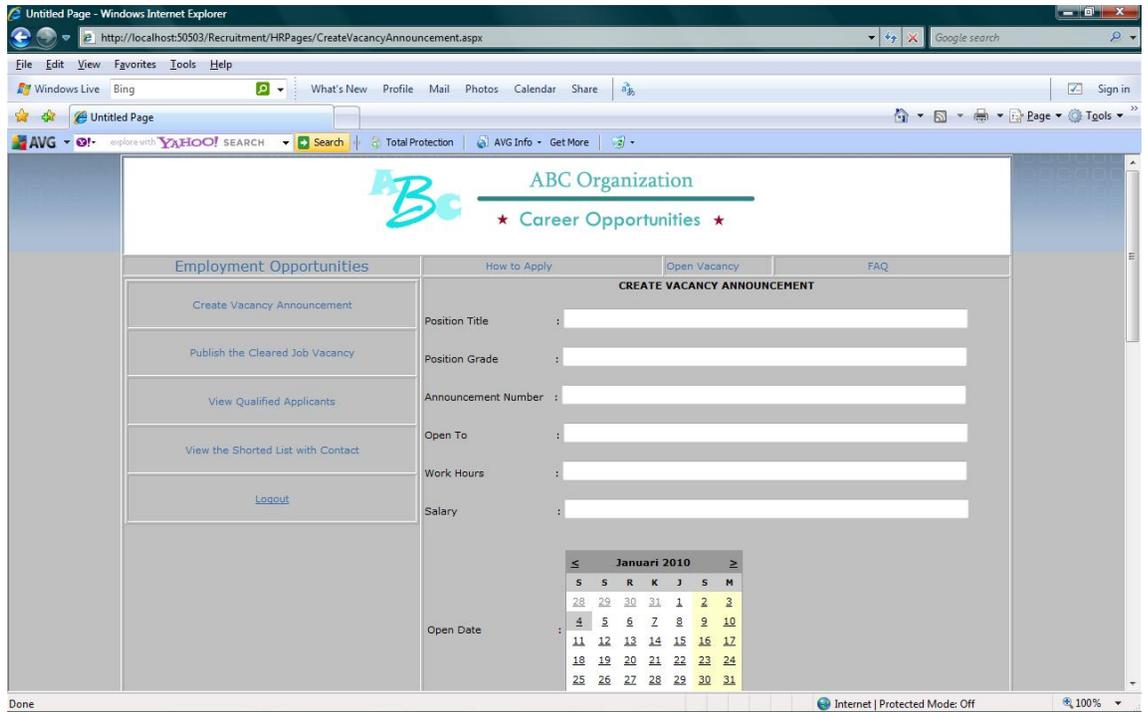


Figure 40 Create Vacancy Announcement Sample Screenshot

- Publish the Cleared Job Vacancy:

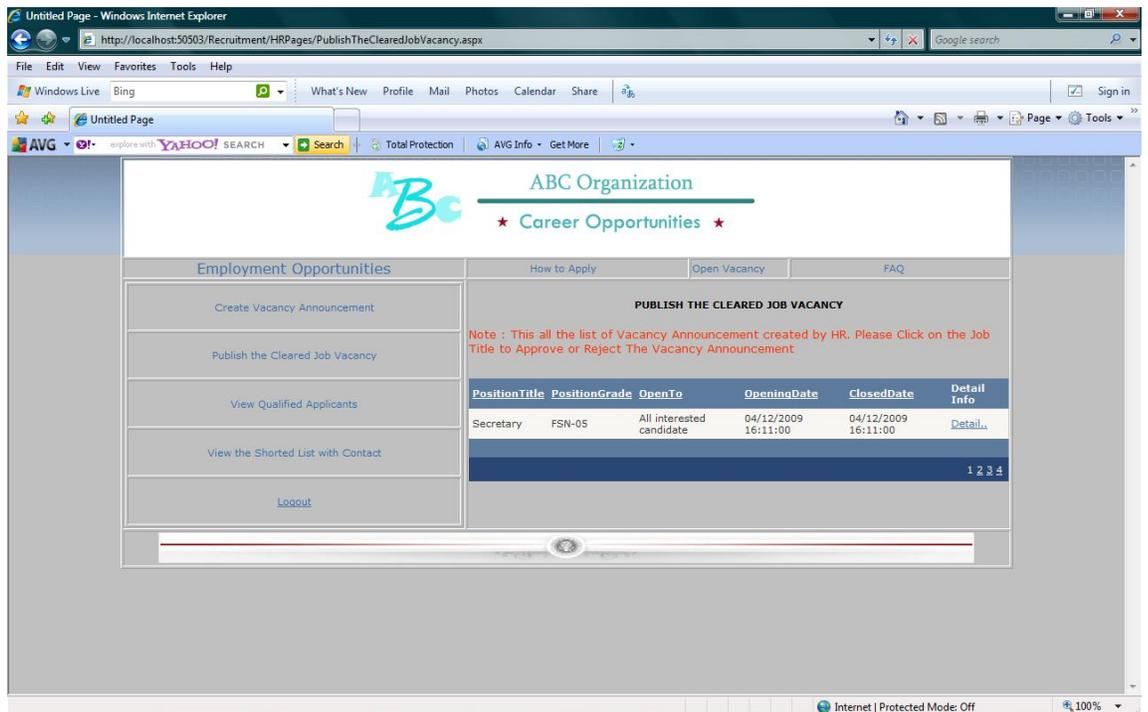


Figure 41 Publish the Cleared Job Vacancy Sample Screenshot

IV. HR Officer Page:

- Clear the Approved Vacancy Announcement

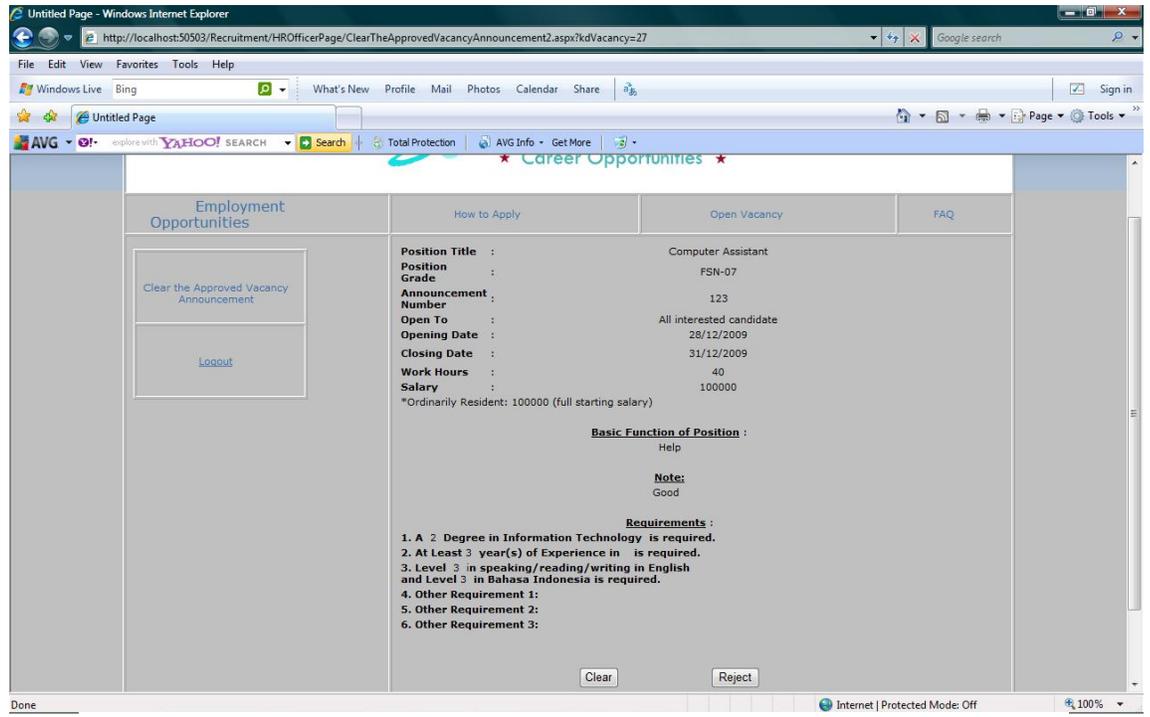


Figure 42 Clear the Approved Vacancy Announcement Sample Screenshot

V. Related Section Pages:

- View Qualified Applicant:

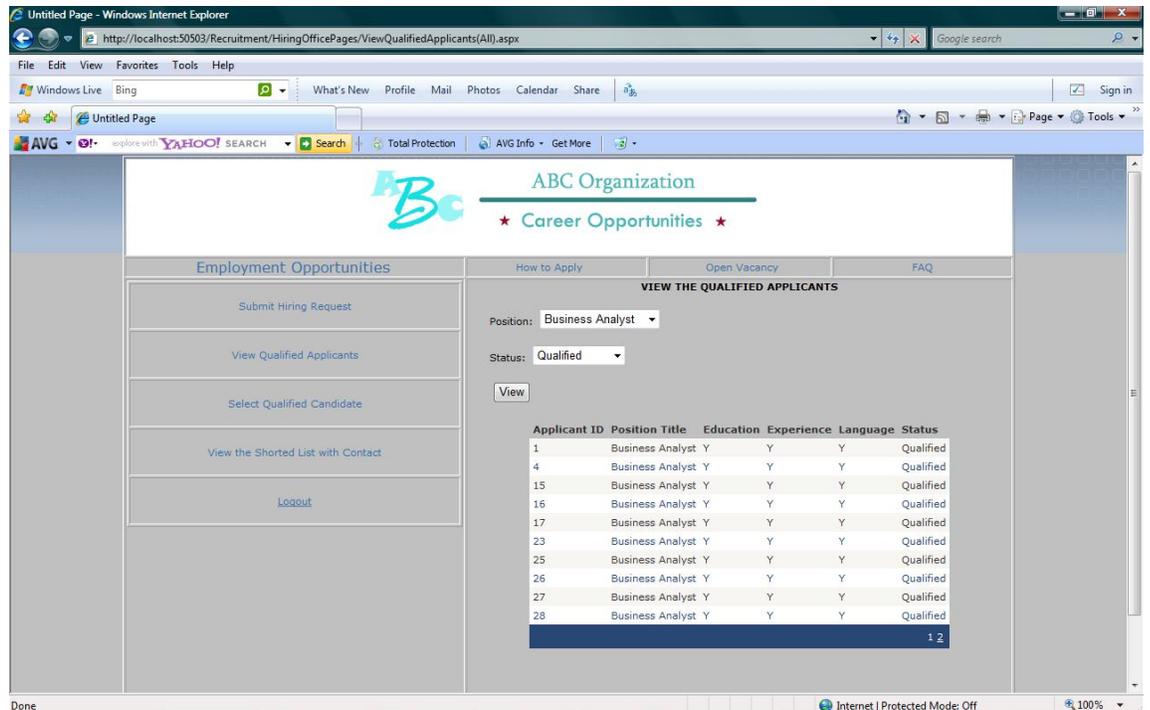


Figure 43 View Qualified Applicant Sample Screenshot

- Select Qualified Candidate:

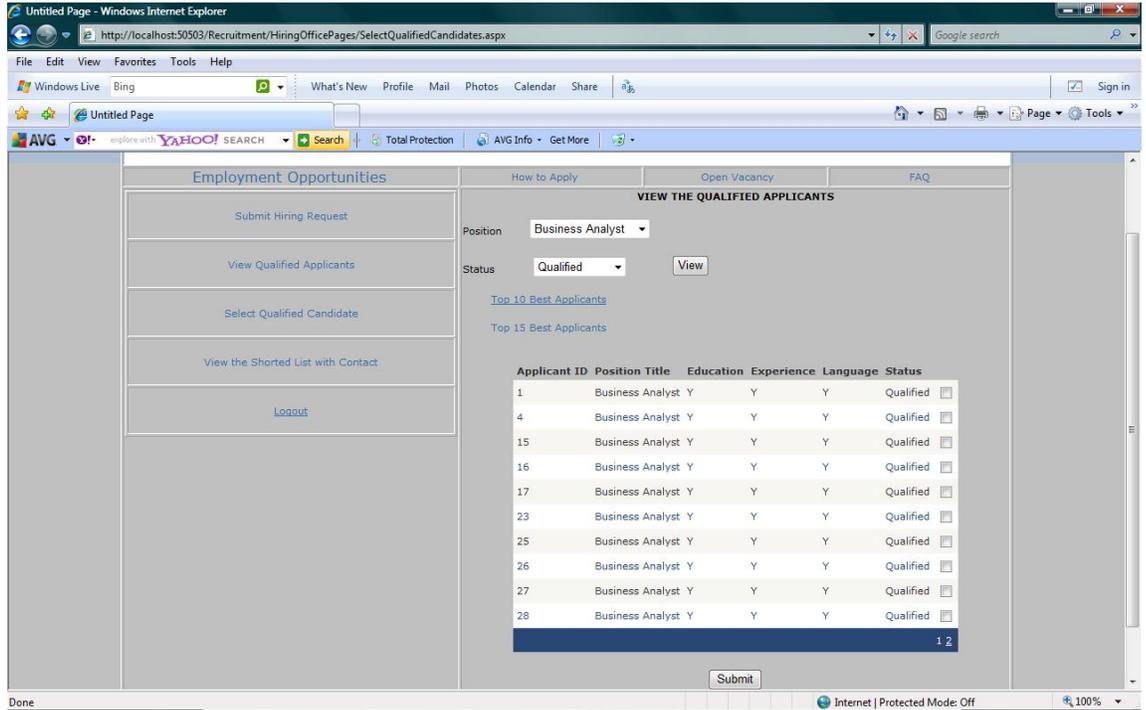


Figure 44 Select Qualified Candidate Sample Screenshot

- View the Shorted List with Contact

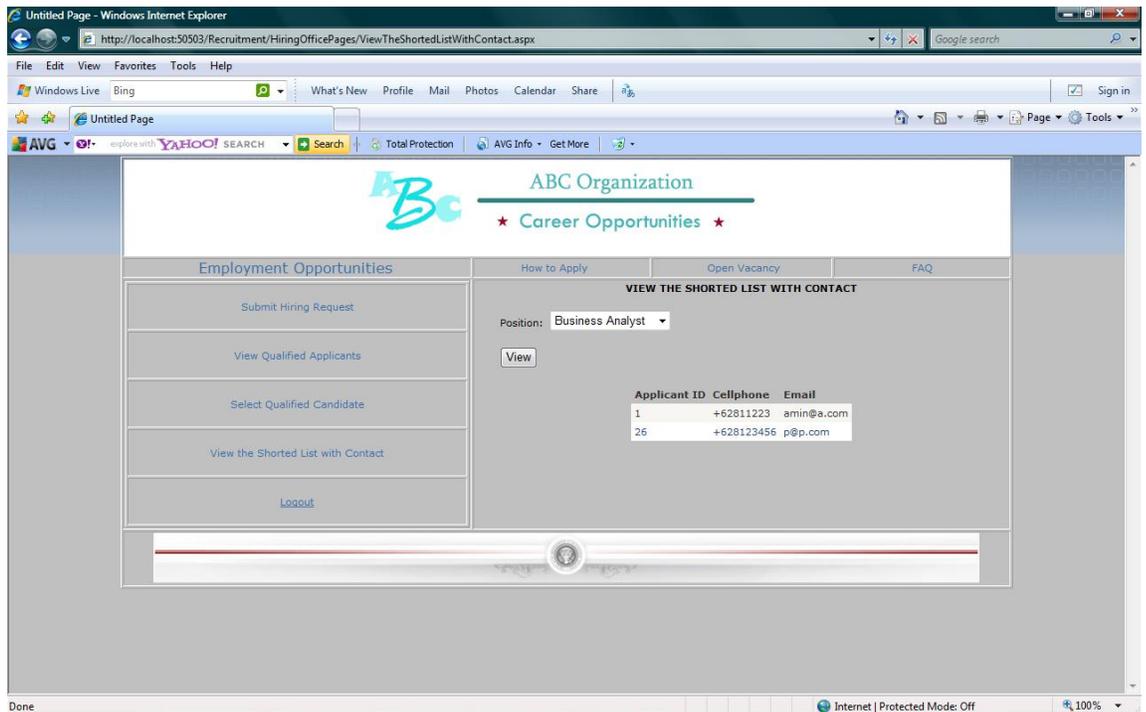


Figure 45 View the Shorted List with Contact Sample Screenshot

5.5 Test Plan

5.5.1 Module Testing

After the each coding phase finished, unit testing is being done. This test is done to ensure each unit work properly and correctly. If a bug found in unit testing, the will be corrected and the coding is being revised again. The revised version will be tested again to ensure that it has worked correctly. These are the result of the tests:

I. Applicants Pages:

Unit Function	Unit Input and Assumption	Unit Process	Unit Output	Status
Register	1. User’s username and password 2. User is not yet a member	1. Pass the data to User database	1. Processing data, whether success, fail, or invalid data)	Ok

Table 42 Register Unit Testing

Unit Function	Unit Input and Assumption	Unit Process	Unit Output	Status
Apply the job	1. User’s OF-612 Documents 2. User’s Resume 3. User’s Cover Letter 4. User has logged in	1. Pass the data to User database	1. Detail Job Vacancy	Ok

Table 43 Apply the Job Unit Testing

Unit Function	Unit Input and Assumption	Unit Process	Unit Output	Status
View Available Job	1. User's chosen branch	1. Search database data based on the branch	1. List of available job vacancy	Ok

Table 44 View Available Job Unit Testing

II. HRO Pages:

Unit Function	Unit Input and Assumption	Unit Process	Unit Output	Status
Create Vacancy Announcement	1. Hiring request from Related Section 2. HRO has logged in	1. Pass the data to Job Vacancy database	1. Detail job vacancy announcement	Ok

Table 45 Create Vacancy Announcement Unit Testing

Unit Function	Unit Input and Assumption	Unit Process	Unit Output	Status
Publish the Cleared Job Vacancy	1. Detail job vacancy announcement 2. HRO has logged in	1. Pass the data to Job Vacancy database	1. Published job vacancy announcement	Ok

Table 46 Publish the Cleared Job Vacancy Unit Testing

Unit Function	Unit Input and Assumption	Unit Process	Unit Output	Status
View All Applicants	1. HRO has logged in	1. Search database data for all applicants	1. List of all applicants	Ok

Table 47 HRO View All Applicants Unit Testing

Unit Function	Unit Input and Assumption	Unit Process	Unit Output	Status
View the Qualified Applicants	1. HRO has logged in	1. Search database data for qualified applicants	1. List of qualified applicants	Ok

Table 48 HRO View the Qualified Applicants Unit Testing

Unit Function	Unit Input and Assumption	Unit Process	Unit Output	Status
View the Non – Qualified Applicants	1. HRO has logged in	1. Search database data for non – qualified applicants	1. List of non – qualified applicants	Ok

Table 49 HRO View the Non-Qualified Applicants Unit Testing

Unit Function	Unit Input and Assumption	Unit Process	Unit Output	Status
View the Shorted List with Contact	1. Shorted list chosen by Related Section 2. HRO has logged in	1. Search database data for shorted list with contact	1. Shorted list with contact	Ok

Table 50 HRO View the Shorted List with Contact Unit Testing

III. HR Officer Page:

Unit Function	Unit Input and Assumption	Unit Process	Unit Output	Status
Clear the Approved Document	1. List of approved documents	1. Pass the data to cleared job vacancy database	1. Cleared documents	Ok

Table 51 Clear the Approved Document Unit Testing

IV. Related Section Pages:

Unit Function	Unit Input and Assumption	Unit Process	Unit Output	Status
Submit Hiring Request	1. Job vacancy 2. Related Section has logged in	1. Pass the data to hiring request database	1. Hiring request	Ok

Table 52 Submit Hiring Request Unit Testing

Unit Function	Unit Input and Assumption	Unit Process	Unit Output	Status
View All Applicants	1. Related Section has logged in	1. Search database data for all applicants	1. List of all applicants	Ok

Table 53 Related Section View All Applicants Unit Testing

Unit Function	Unit Input and Assumption	Unit Process	Unit Output	Status
View the Qualified Applicants	1. Related Section has logged in	1. Search database data for qualified applicants	1. List of qualified applicants	Ok

Table 54 Related Section View the Qualified Applicants Unit Testing

Unit Function	Unit Input and Assumption	Unit Process	Unit Output	Status
View the Non - Qualified Applicants	1. Related Section has logged in	1. Search database data for non – qualified applicants	1. List of non – qualified applicants	Ok

Table 55 Related Section View the Non-Qualified Applicants Unit Testing

Unit Function	Unit Input and Assumption	Unit Process	Unit Output	Status
View Top 10 Best Applicants	<ol style="list-style-type: none"> 1. Applicant's OF-612 2. Applicant's resume 3. Related Section has logged in 	<ol style="list-style-type: none"> 1. Search database data for applicants 2. Sorting data to top 10 best applicants, based on education, experience, and language 	<ol style="list-style-type: none"> 1. List of top 10 best applicants 	Ok

Table 56 View Top 10 Best Applicants Unit Testing

Unit Function	Unit Input and Assumption	Unit Process	Unit Output	Status
View Top 15 Best Applicants	<ol style="list-style-type: none"> 1. Applicant's OF-612 2. Applicant's resume 3. Related Section has logged in 	<ol style="list-style-type: none"> 1. Search database data for applicants 2. Sorting data to top 15 best applicants, based on education, experience, and language 	<ol style="list-style-type: none"> 1. List of top 15 best applicants 	Ok

Table 57 View Top 15 Best Applicants Unit Testing

Unit Function	Unit Input and Assumption	Unit Process	Unit Output	Status
Select the Qualified Applicants for Test	<ol style="list-style-type: none"> 1. List of top 10 and top 15 best applicants 2. Related Section has logged in 	<ol style="list-style-type: none"> 1. Search database data for top 10 and top 15 best applicants 2. Pass the data to shorted list with contact database 	<ol style="list-style-type: none"> 1. List of qualified applicants for test 	Ok

Table 58 Select the Qualified Applicants for Test Unit Testing

Unit Function	Unit Input and Assumption	Unit Process	Unit Output	Status
View the Shorted List with Contact	1. Shorted list chosen by Related Section 2. Related Section has logged in	1. Search database data for shorted list with contact	1. Shorted list with contact	Ok

Table 59 Related Section View the Shorted List with Contact Unit Testing

5.5.2 Integration Testing

Integration testing has not been done with the system inside ABC organization. The reason of this is because this HR application is not yet done until the end result of the application, which is to get the selected applicant that passed all of the tests. The current application only emphasize on the core of the application, which is to get the result of qualified applicants in the form of shorted list with their contact.

In the future, this application will be developed more until the end result of all the process in recruitment and selection. After that, the integration test will be done for the complete application in ABC organization.