Senior Project, 2013, Fall
Virtual Job Fair V2

Student: Jorge Fernandez, Florida International University
Mentor: Juan Caraballo, Industry Advisor
Instructor: Masoud Sadjadi, Florida International University

There is a need for a system that allows students and employers to connect and simulate job interviews. Initially universities provided career sites that allowed employers to post job openings and internships. During the 2013 spring semester a group of students created the Virtual Job Fair website which allowed employers and students to interact through a webcam. While this system greatly improves the previous system, there are still some problems that need to be addressed:

Students are not able to virtually showcase their skills. Students and employers are not able to share documents between each other. Employers are not able to contact students through other means other than by email. Students and employers are not reminded of important deadlines.

My role in the project was to allow users to share and view each other’s screen, send and receive text messages as well as receive reminder notifications.

The PHPUnit software testing framework was used to verify that all subsystem followed specification and performed as planned. Some fixtures were created in order to simulate a clean state and perform tests in a fresh environment. Due to the limitations imposed by the Yii framework on controller unit tests; it was necessary to perform extensive research on how to accomplish this task.

Rational Functional Tester was used to perform system testing. The simplicity and flexibility provided by the script recording tool proved to be immensely useful for creating tests. In order to automate tests we also used data pools which allowed us to easily assess the behavior of the system.

The system shall:
- Allow students and employers to share their screens
- Allow students and employers to view each other’s screen
- Allows employers to contact students through SMS
- Allows students and employers to receive SMS notifications
- Allow students and employers to confirm their phone numbers through SMS validation.
- Allow student and employers to create new documents
- Allow student and employers to share documents
- Allow FIU students to log in using their SCIS credentials.
- Allows students and employers to share and create whiteboard drawings.

Virtual Job Fair V2 offers students and employers an opportunity to have an interview experience which aims to closely simulate an in-person interview. VJF provides employers the flexibility to virtually interview students from any location. This system benefits both students and employers since it removes many of the limitations suffered by both parties during the screening process.

VJF provides students with an opportunity to demonstrate their skills by using the screen sharing functionality, share ideas through the collaborative text editor, share images or simply brainstorm by using the online whiteboard. Additionally, it also facilitates students with the login process by allowing them to use their existing SCIS credentials as well as providing reminders and directly connecting them with employers through their own SMS enabled phones.

Acknowledgement
I am thankful for the help that I received from my group members, Luis Irizarry and Luis Benjumea.