Online Education Employment Project (Website)

Prototype Report

<div align="right">

VEL Team

Date: 15/SEP/2015

</div>

Document Modification History/Revision log

Version	Date	Author	Description of Change
1.0	10/09/2015	Miranda, Irene	Initial version
2.0	15/09/2015	Irene	Finished detail parts of the reports
3.0	15/09/2015	Kaii	Add Scrum Management and Mobile Friendly test
4.0	15/09/2015	VEL Team	Add individual Retrospective

Contents

Project Description:

The goal of this project is to create an adaptive (mobile friendly) website to help IT students and unemployed people to get useful skills. The home page should draw visitors' attention so that they would like to register as fixed users. And users can choose the courses they want to take according to some success stories. We use the .NET Framework and the Visual Studio development environment to develop the website.

No.	GitHub username	SeeNowDo	Official name	UPI
1	gaoyiqun	Irene	Yiqun Gao	YGAO742
2	huajinxie	Kaii	Huajin Xie	HXIE519
3	likaihe	Likai	Likai He	LHE838
4	lulujing	LuLu	Jing Lu	JLU986
5	vasanthnewzealand	V	Vasanth Boraiyan	VBOR051
6	yazang	Clay	Chen Yang	CYAN988
7	yinqi522	Miranda	Yu Guo	YGUO325
8	YsqEvilmax	Shawn	Shaoqing Yu	SYU702

Delivered Software Increment

Our team has finished 6 user stories in the product backlog in the past Sprint. The prototype is a website including Login function, Admin function, homepages, Success story list pages and detail pages. This website uses a 3-tier architecture. Communication and data exchange between the 3 layers can be easily achieved with Model-View-Controller (MVC5) patterns. The presentation layer, business logic layer and database layer can be developed and maintained separately by using MVC5. We also redesigned the database to ensure that there was no conflict in the DB integration.

Currently completed pages and functions in the prototype can be tracked through two flows – Admin flow and Visitor flow:

From the Admin Flow: Homepages → Login page (Admin) → Success Story List Admin Pages → Success Story Detail Admin pages → Success Story Detail Admin Pages (Add/Edit/Delete) → Success Story List Admin Pages

Form the Visitor Flow:

1. Homepages → Success Story List Pages → Success Story Detail Pages

2. Homepages → Team Profile Pages/ FAQs Pages

Completed Product Backlog

| No.	Completed User Stories		Relative tasks
1.	As CEO, I would like to re-design our website (first page) to make it mobile friendly.	So that we can meet ranking requirement, because Google adopted mobile-friendliness as a ranking signal.	(Home Pages)
2.	As a VISITOR (anonymous user), I would like to read some success stories of previous students and select the same courses.	So that I can follow the same approach and select suitable courses accordingly.	(Success stories List Pages)
3.	As a VISITOR (anonymous user), I would like to read the detail of some success story and get to know what courses they've learned.	So that I can order the same courses.	(Success stories detail pages)
4.	As CEO, I would like our team profile and FAQ to be well noticed.	So that we can provide more detail information about our company.	(Team Profile & FAQs Page)
5.	As an ADMIN (course advisor), I would like to maintain success stories with Add, Update, and Delete.	So I can update and maintain the story pages.	(Admin functions of success story pages included add, edit, delete pages)
6.	As a USER, I would like to login to my category (Admin or Students) in the system.	So I can maintain or learn on the website.	(Login Pages)

Sprint Backlog

Story ID	User Story	Task ID	Task	Owner & Participant	UPI	Hours
1	Home Page	31	Home Draft	ClayY	CYAN988	6.0
		31	Home Draft	V	VBOR051	2.0
		32	Home Page Update (after review)	ClayY	CYAN988	2.0
		32	Home Page Update (after review)	Irene	YGAO742	6.0
		33	Test Case (HP)	Irene	YGAO742	1.0
		34	Unit Test (HP)	Irene	YGAO742	1.0
2	Success Story List	41	Story List (staic)	LikaiH	LHE838	10.0
		42	Story List (dynamic)	ClayY	CYAN988	8.0
		43	Test Case (Story List)	Lulu	JLU986	4.0
		44	Unit Test (Story List)	Irene	YGAO742	1.0
3	Success Story Detail	45	Detail Success Story Page	ClayY	CYAN988	4.0
		46	Test Case (Story Detail)	Miranda	YGUO425	3.0
		47	Unit Test (Story Detail)	Miranda	YGUO425	2.0
4	Team Profile & FAQ	48	Team profile page	ClayY	CYAN988	2.0
		49	FAQ page	LikaiH	LHE838	2.0
5	Admin of Success Story	51	Admin (List page)	Kaii	HXIE519	9.0
		52	Admin (Edit page)	Kaii	HXIE519	8.0
		53	Admin (Add page)	V	VBOR051	7.0
		53	Admin (Add page)	Kaii	HXIE519	1.0
		54	Test Case & NUnit (Add)	Miranda	YGUO425	4.0
		55	Test Case & NUnit (Edit)	Miranda	YGUO425	4.0

		56	Test Case & NUnit (List)	Lulu	JLU986	4.0
		57	Unit Test (Story Detail)	Lulu	JLU986	3.0
		58	Admin (Delete page)	Kaii	HXIE519	3.0
6	Login Page	61	Login Page	Miranda	YGUO425	6.0
		62	Test Case & Nunit (Login)	Irene	YGAO742	4.0
		63	Unit Test (Login)	Irene	YGAO742	1.0
x1	Developing Enviroment	11	Collect DB Design and PHP programs	V	VBOR051	2.0
		12	Create New DB	V	VBOR051	2.0
		12	Create New DB	Miranda	YGUO425	1.0
		13	Prepare dummy Data	V	VBOR051	1.0
		13	Prepare dummy Data	Miranda	YGUO425	3.0
		21	Create .Net solution	Shawn	SYU702	4.0
		22	Create header & Footer template	Shawn	SYU702	6.0
		23	Create base page	Shawn	SYU702	15.0
x2	Scrum Activities	01	Client Meeting(25/08/2015)	ALL members		4.0
		02	Scrum board init	Kaii	HXIE519	1.0
		03	Draft tasks list	Kaii	HXIE519	1.0
		91	Daily Scrum (28/08/2015)	ALL members		1.0
		92	Daily Scrum (02/09/2015)	ALL members		1.0
		93	Daily Scrum (05/09/2015)	ALL members		1.0
		94	Daily Scrum (08/09/2015)	ALL members		1.0
		95	Daily Scrum (11/09/2015)	ALL members		1.0
		96	Retrospective Meeting	ALL members		4.0
		97	Client review Meeting(14/09/2015)	ALL members		6.0
		98	Client review Meeting(14/09/2015)	ALL members		2.0

Prototype Details

1. <u>User Story 1: New Designed Mobile Friendly Home Pages – PC View and Phone View</u>
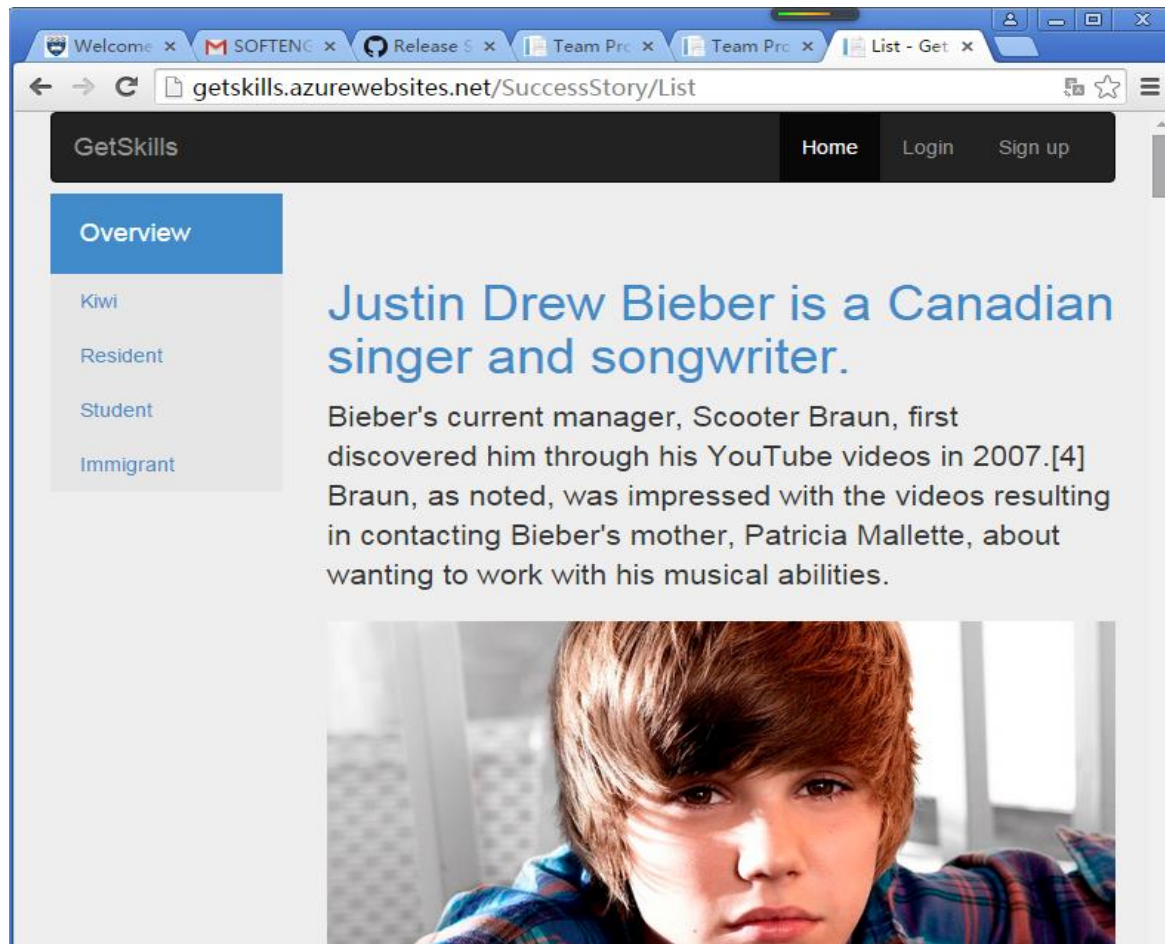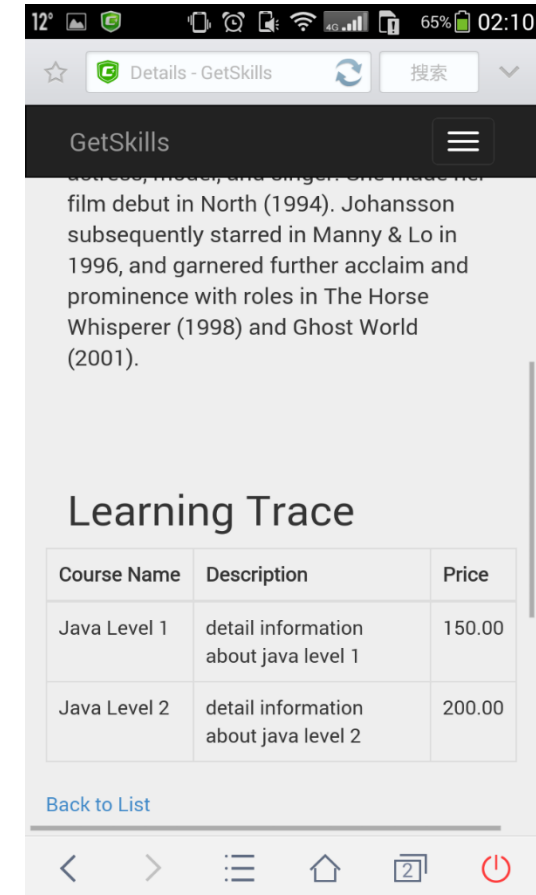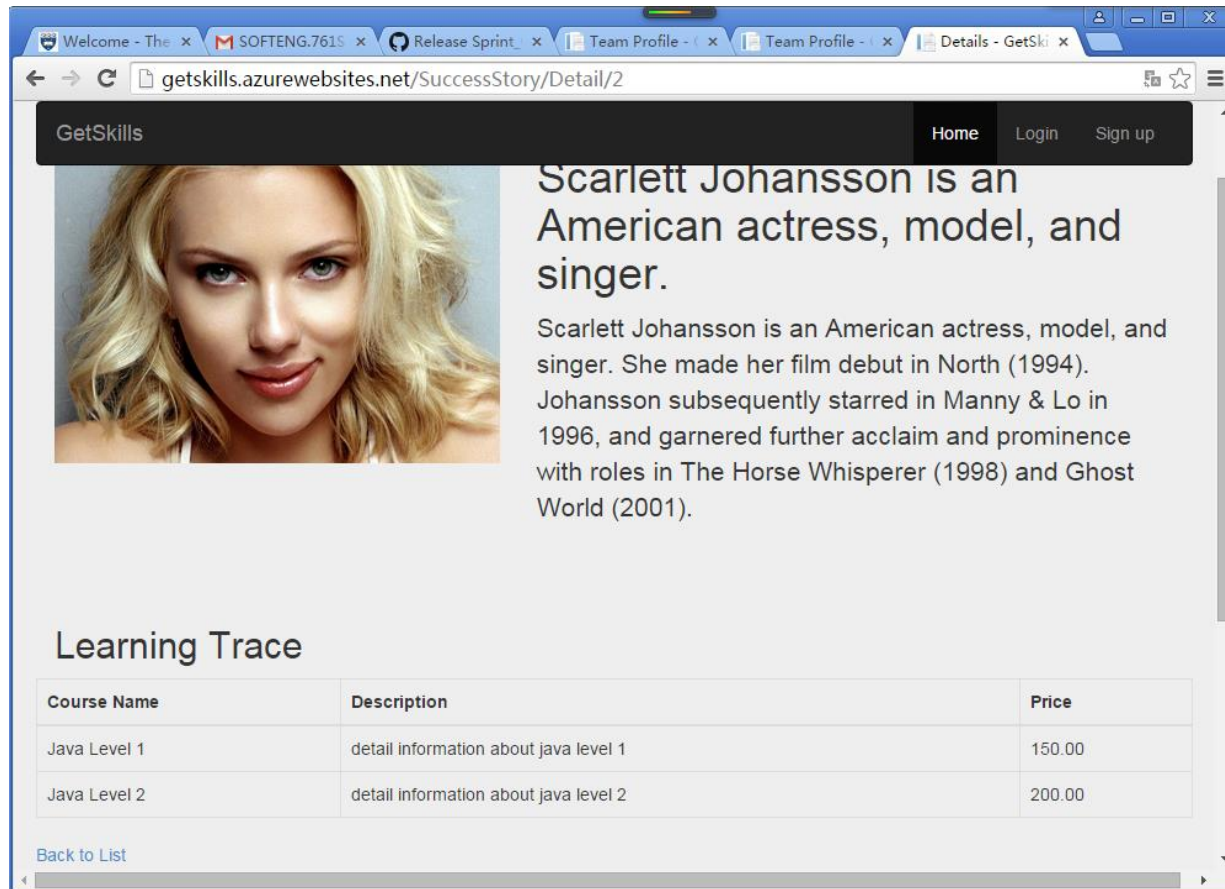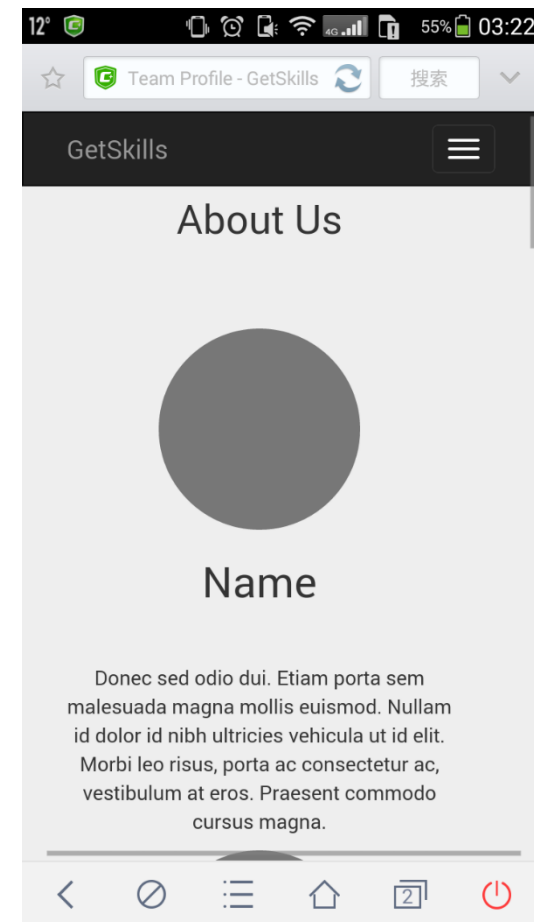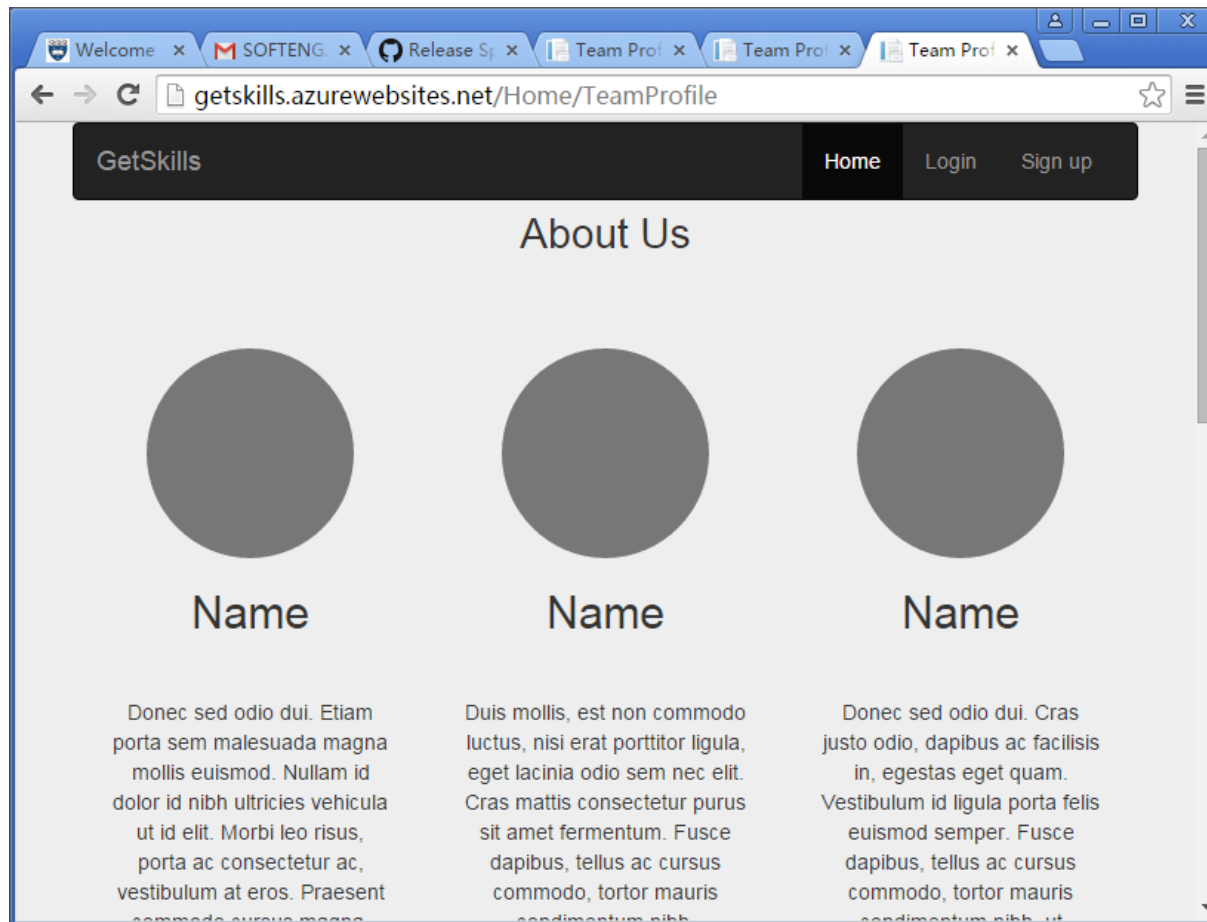   URL: http://getskills.azurewebsites.net/
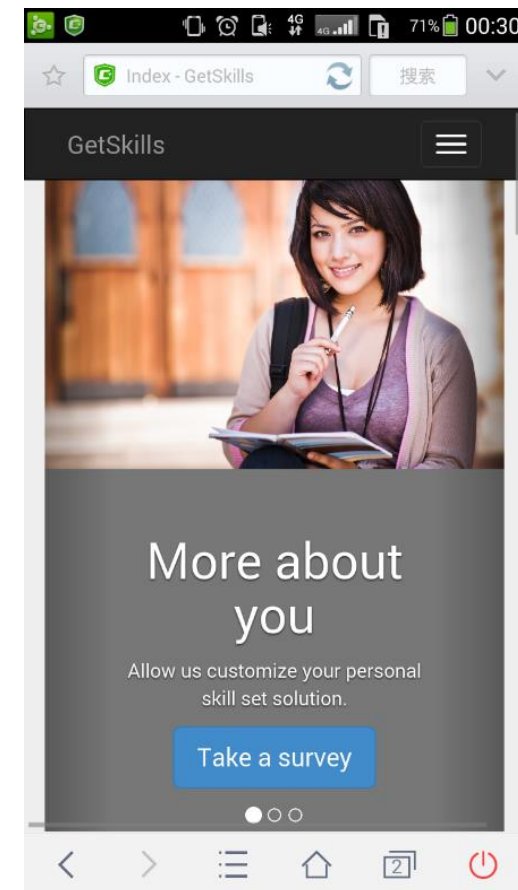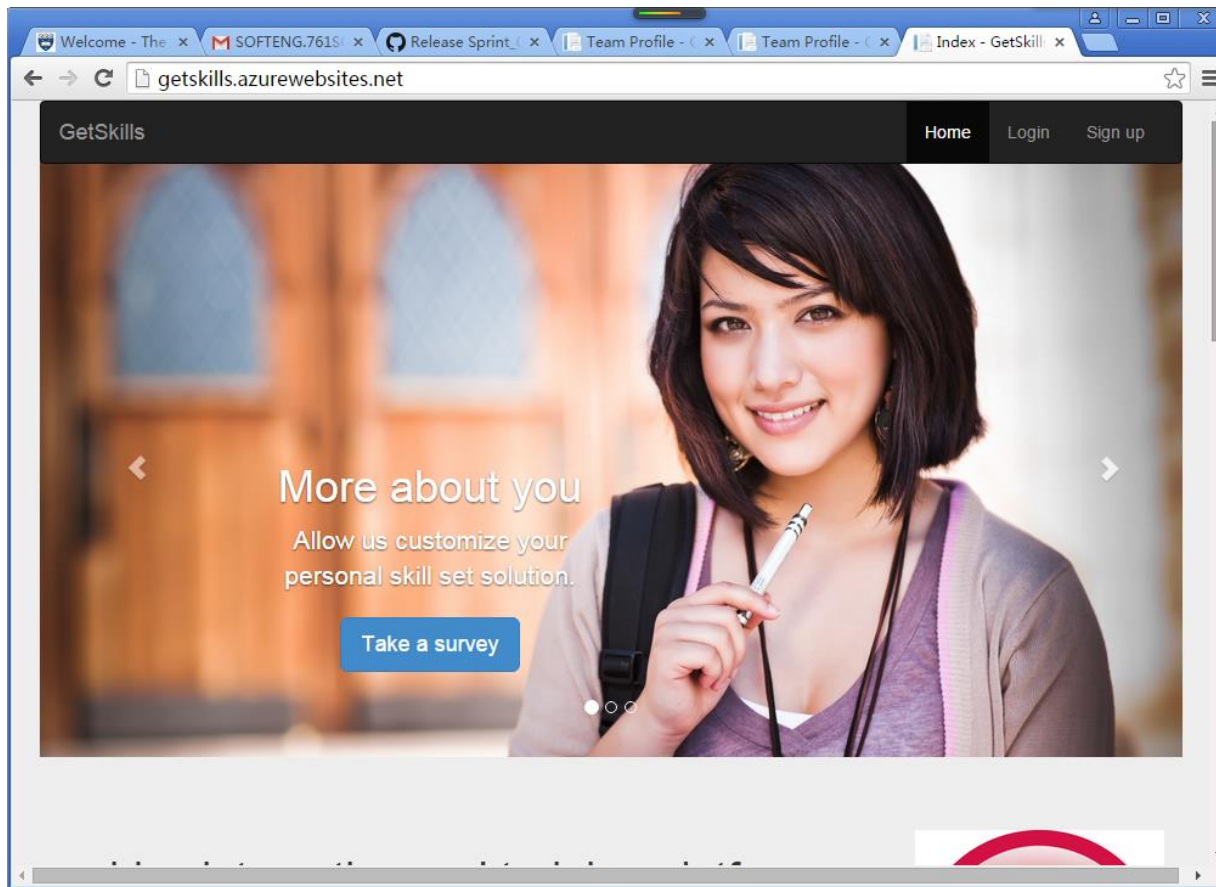
NOTE: In this prototype, most of the data is dummy data, not realistic data. We are concentrate on displaying and refining the main functions of the website in this Prototype. The fake data will probably be replaced in the following iterations.

2. <u>User Story 2: As a VISITOR (anonymous user), I would like to read some success stories of previous students.</u>
    ** At the bottom of the Home Page (http://getskills.azurewebsites.net/), there is a link – "Success Stories" located in "Site Map" zone.
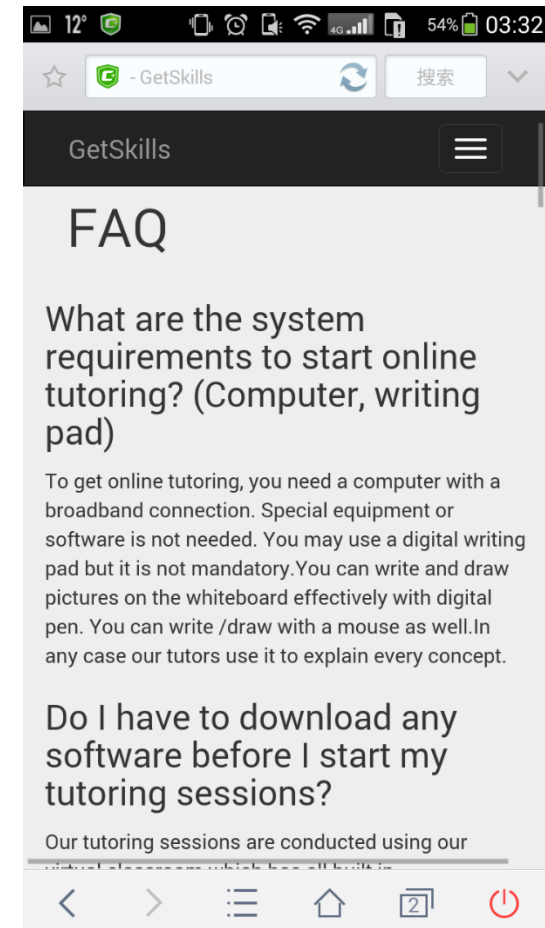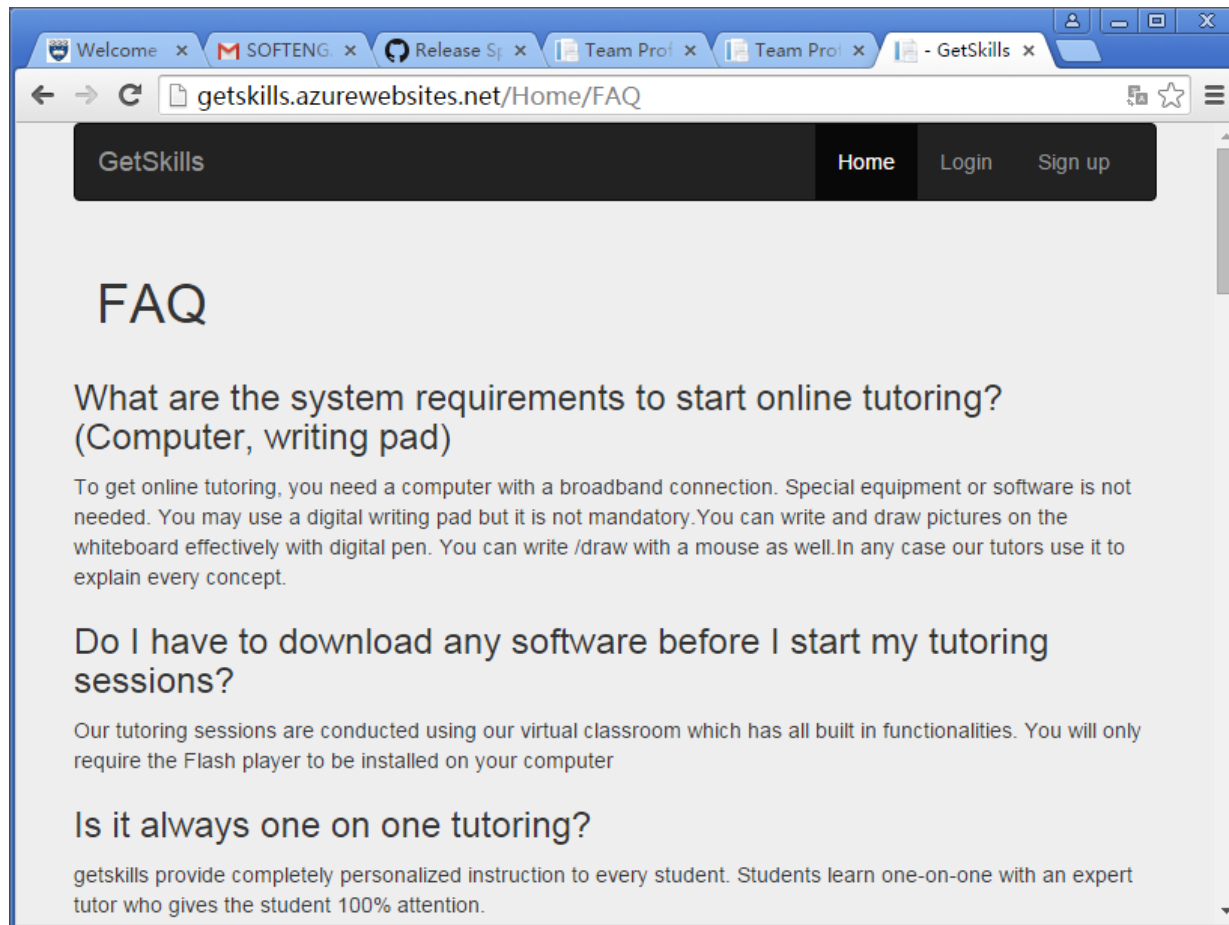   URL: http://getskills.azurewebsites.net/SuccessStory/List
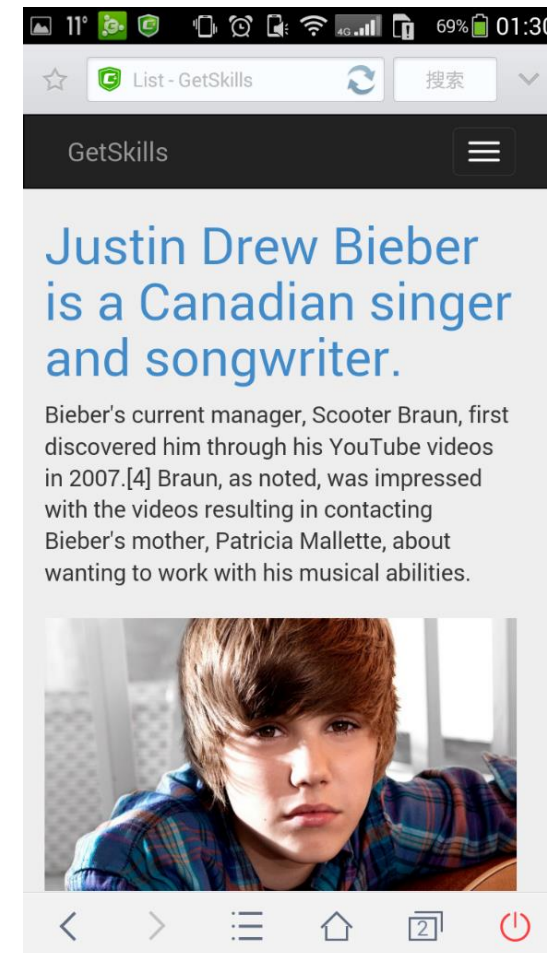
NOTE: In this prototype, most of the data is dummy data, not realistic data. We are concentrate on displaying and refining the main functions of the website in this Prototype. The fake data will probably be replaced in the following iterations.

3. <u>User Story 3: As a VISITOR (anonymous user), I would like to read the details of some success stories.</u>
    ** Click the title of each success story in Success Stories List Page (http://getskills.azurewebsites.net/SuccessStory/List), the pages will navigate to the relative Success Story Detail Pages. Visitors can jump back to the Success Stories List Pages by clicking 'Back to list' link at bottom.
    URL: For example: http://getskills.azurewebsites.net/SuccessStory/Detail/2, or http://getskills.azurewebsites.net/SuccessStory/Detail/1

NOTE: In this prototype, most of the data is dummy data, not realistic data. We are concentrate on displaying and refining the main functions of the website in this Prototype. The fake data will probably be replaced in the following iterations.

4. <u>User Story 4: As CEO, I would like our team profile and FAQ to be well noticed.</u>

    ** At the bottom of the Home Page (http://getskills.azurewebsites.net/), the 'Team Profile' link will lead visitors to the Team Profile Pages

    URL: http://getskills.azurewebsites.net/Home/TeamProfile

NOTE: In this prototype, most of the data is dummy data, not realistic data. We are concentrate on displaying and refining the main functions of the website in this Prototype. The fake data will probably be replaced in the following iterations.

** At the bottom of the Home Page (http://getskills.azurewebsites.net/), the 'Team Profile' link will lead visitors to the Team Profile Pages

URL: http://getskills.azurewebsites.net/Home/FAQ

NOTE: In this prototype, most of the data is dummy data, not realistic data. We are concentrate on displaying and refining the main functions of the website in this Prototype. The fake data will probably be replaced in the following iterations.

5. <u>User Story 5: As an ADMIN (course advisor), I would like to maintain success stories with Add, Update, and Delete.</u>

   ** For ADMIN functions, Product Owner informed us that they won't maintain the stories by using mobile phones. So that we only developed the PC pages.

   ** Based on security considerations, we decided not to show the 'Admin Login' link on public website pages. Administrators can login to ADMIN pages through the link – http://getskills.azurewebsites.net/Account/AdminLogin

   (UserName: aaaa@163.com   Password: 123456)

   a. Admin URL: http://getskills.azurewebsites.net/SuccessStory?sortOrder=ID_asc
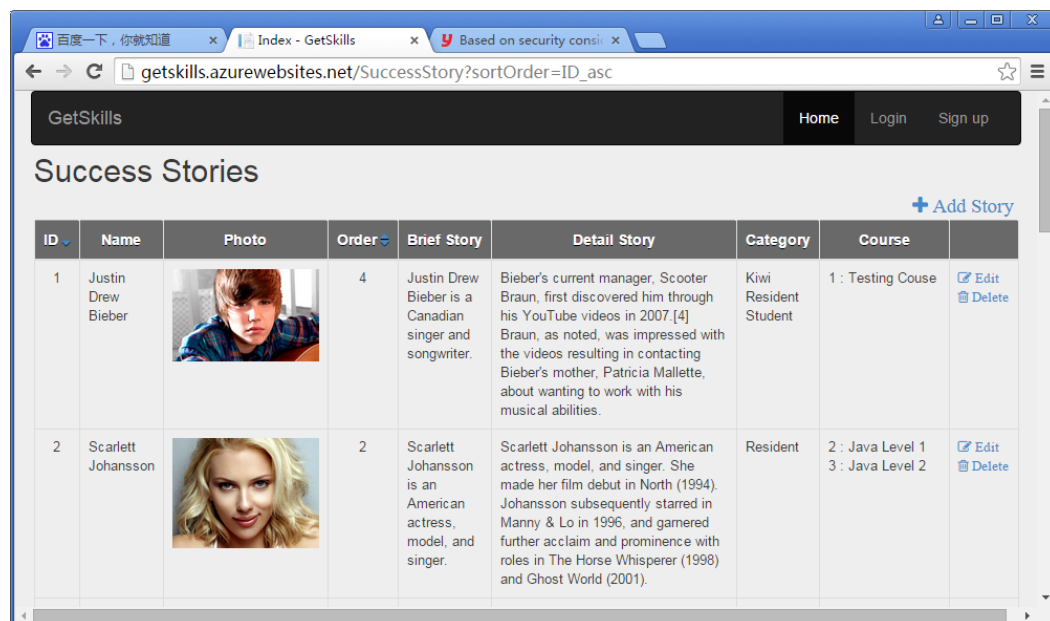
   b. By click the "+ Add Story" on Admin pages, administrators can create new success stories.

   URL: http://getskills.azurewebsites.net/SuccessStory/Create
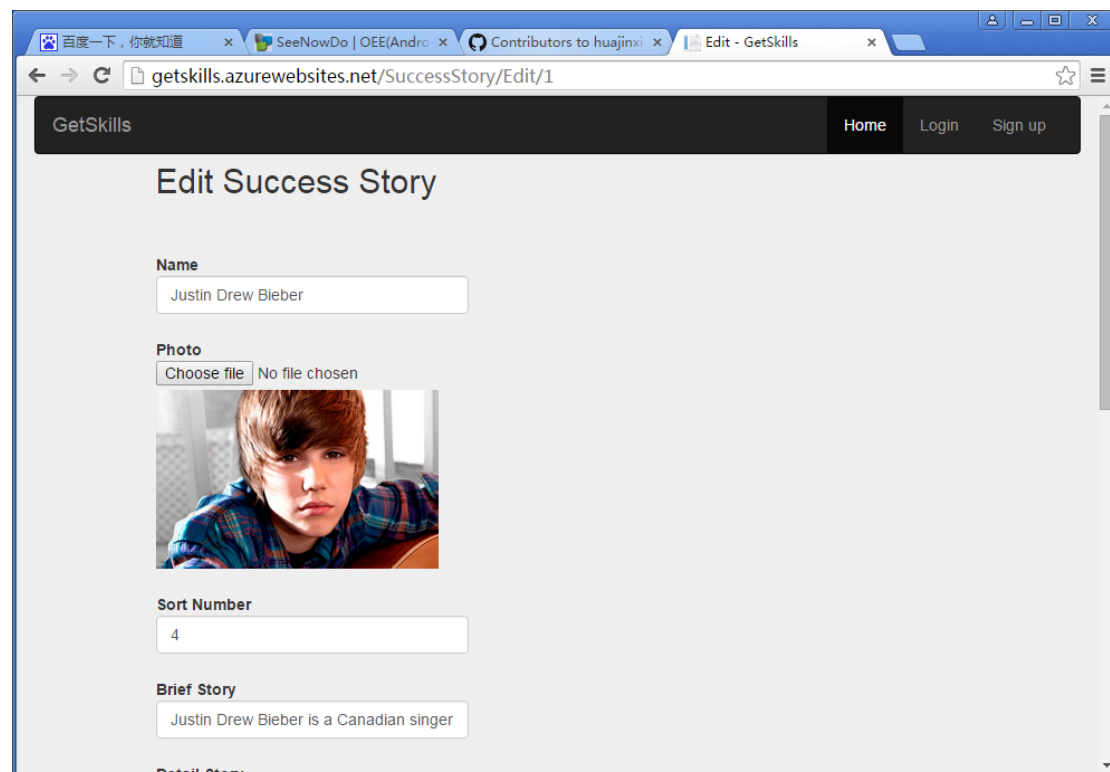
NOTE: In this prototype, most of the data is dummy data, not realistic data. We are concentrate on displaying and refining the main functions of the website in this Prototype. The fake data will probably be replaced in the following iterations.

c. By click the "Edit" button after each success stories on Admin pages, administrators can edit exist success stories.
    URL: http://getskills.azurewebsites.net/SuccessStory/Edit/1
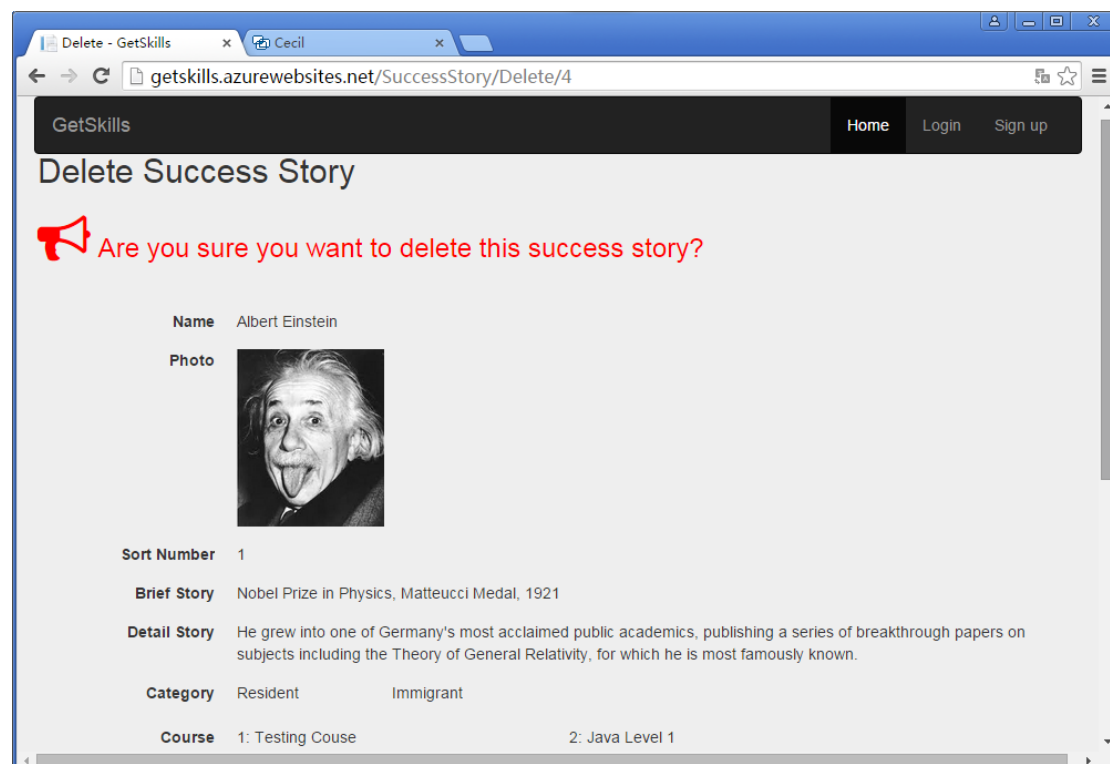
d. By click the "Delete" button after each success stories on Admin pages, administrators can delete exist success stories.
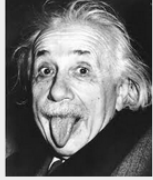   URL: http://getskills.azurewebsites.net/SuccessStory/Delete/4
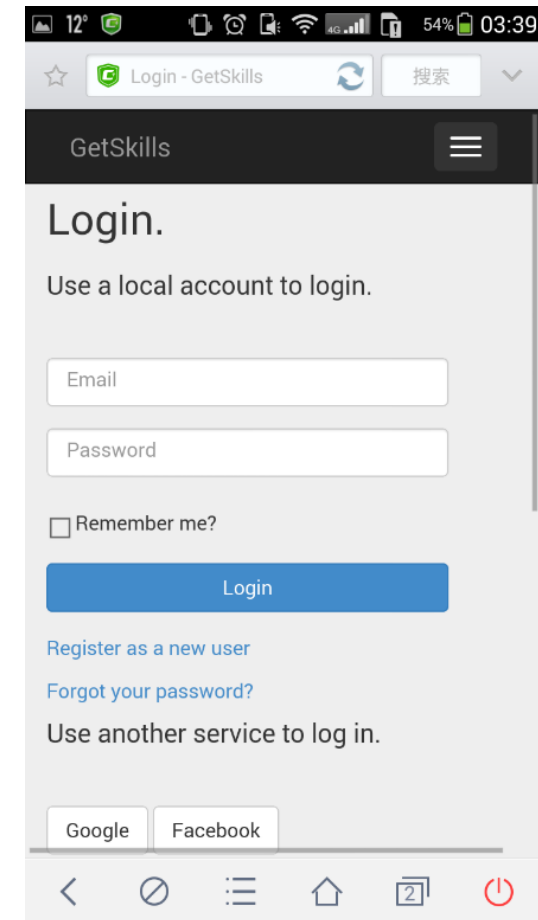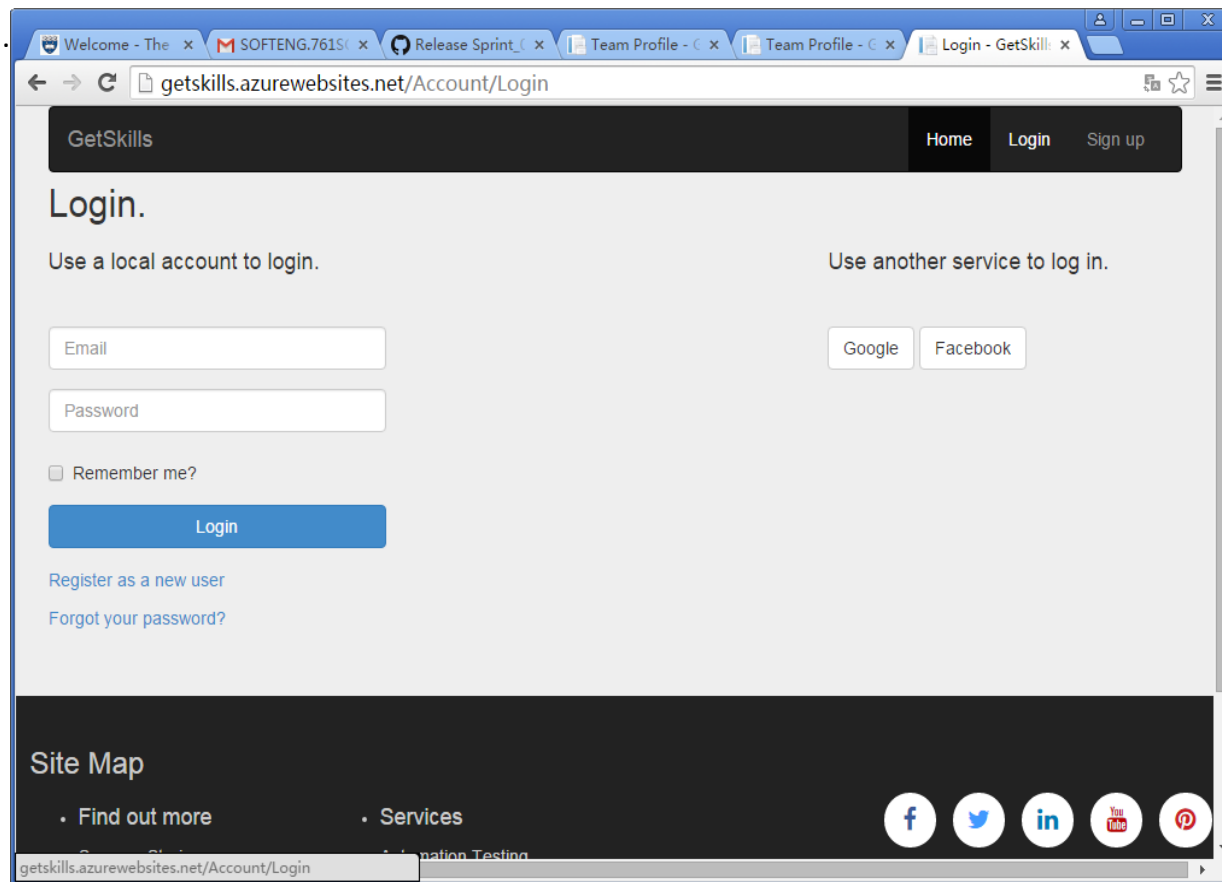

NOTE: In this prototype, most of the data is dummy data, not realistic data. We are concentrate on displaying and refining the main functions of the website in this Prototype. The fake data will probably be replaced in the following iterations.

6. <u>User Story 6: As a USER, I would like to login to my category (Admin or Students) in the system.</u>

   ** No matter which pages visitors are surfing, they can always login/Register in the website by click the related links on heater (Navbar).

   They can also choose to login by using Google Accounts or Facebook Accounts.

   URL: http://getskills.azurewebsites.net/Account/Login

NOTE: In this prototype, most of the data is dummy data, not realistic data. We are concentrate on displaying and refining the main functions of the website in this Prototype. The fake data will probably be replaced in the following iterations.

NUnit Tests

We mainly use Nunit, which is an open source unit testing framework for Microsoft .Net, in completing the test cases and Unit tests processes.

In our project, Unit testing for Web Page is implemented. And NUnit testing is implemented for all Controller Classes and methods. Our tests also including sync unit tests.

The methods in controllers have been tested as more as possible. The source codes have passed all of the 76 test cases.
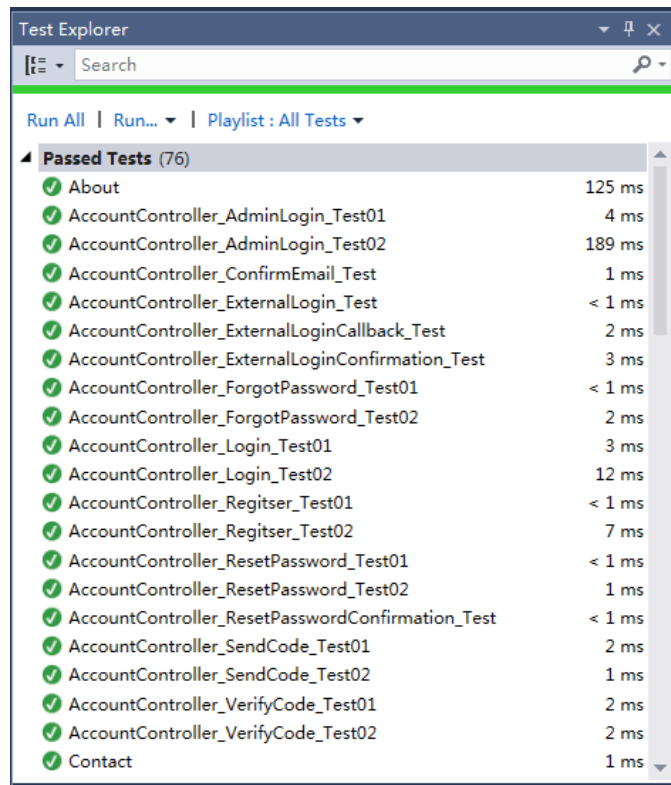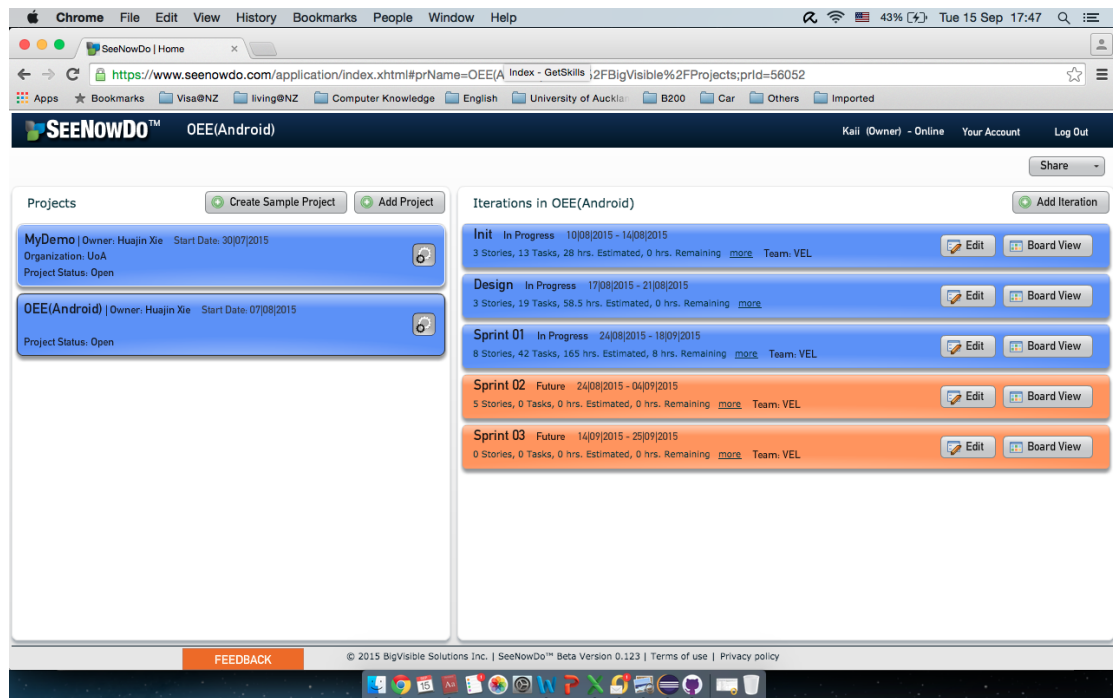

Mobile Friendly Test (Google)

• Test result of old system: Un-friendly

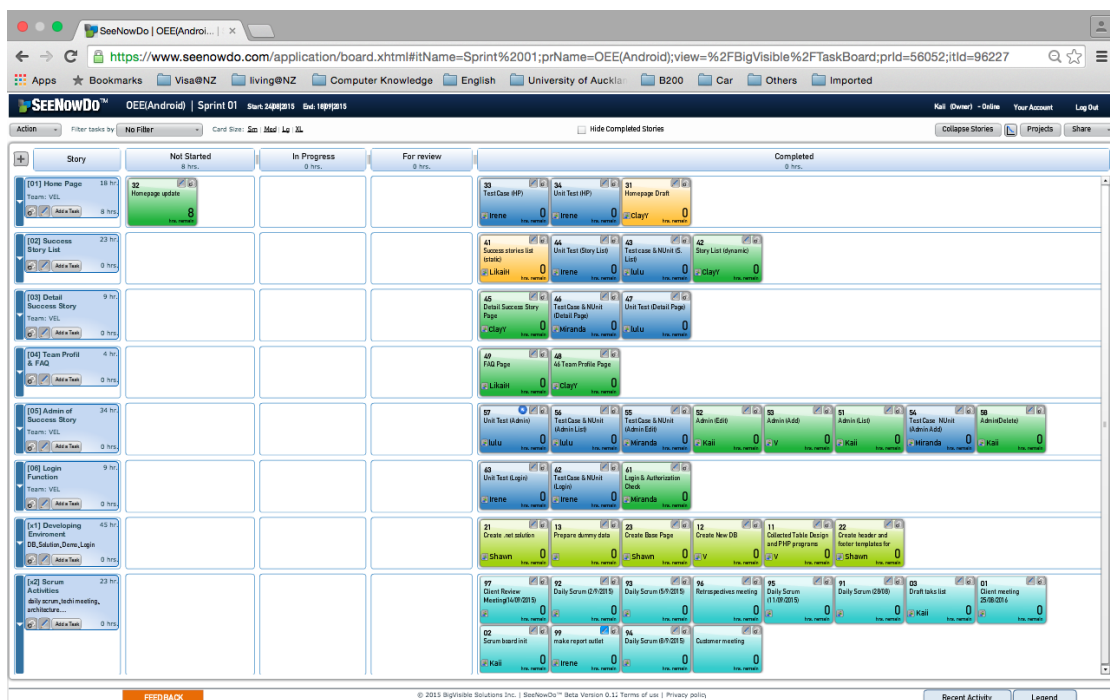• Test result of new system: Mobile friendly
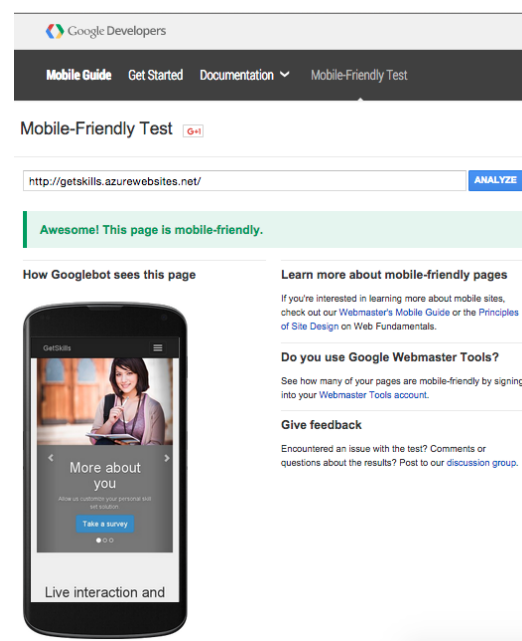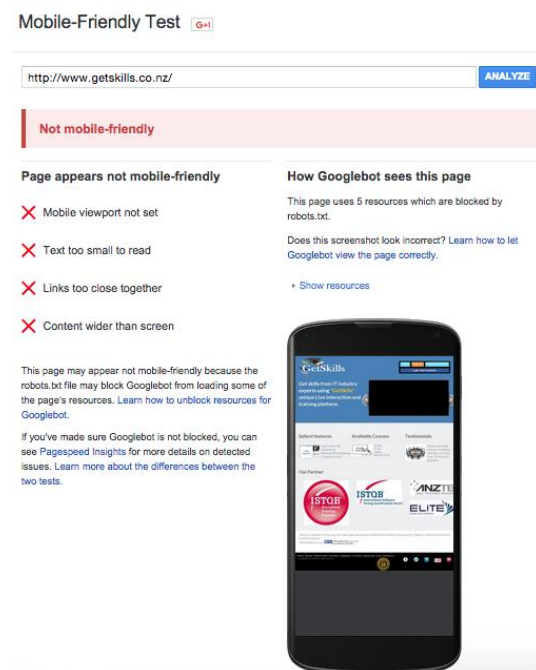
Scrum Management

We use SeeNowDo (URL: https://www.**seenowdo**.com/) as our Scrum management tool.
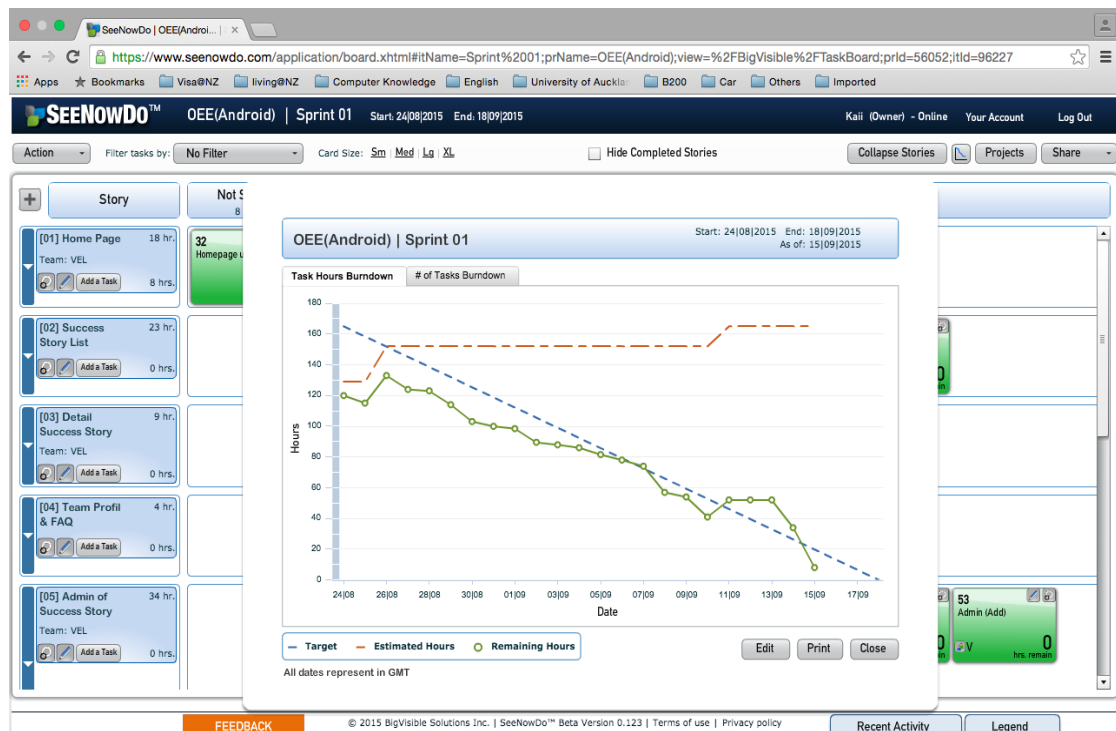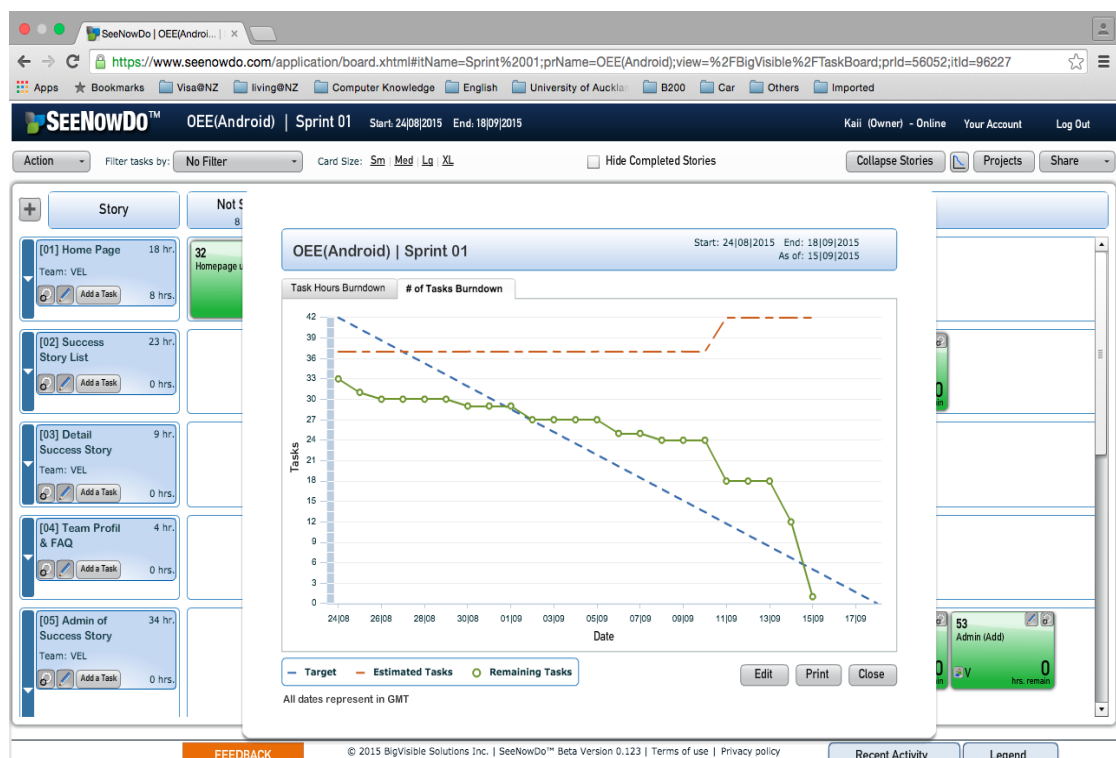
- Main board

- Scrum Board (Sprint 01)

- Burn-down chart (By hours)

- Burn-down chart (By tasks)

Sprint Review

Our team had a Sprint Review meeting with the attendances of Scrum Master, team members and Product Owner–Yadwinder on September 14th. We've displayed our prototype to client. We've get positive feedbacks on most of our efforts for the project.

Product Owner–Yadwinder inspected the project and give us four suggestions in adapting the Prototype.

1. Team Profile pages need to be more colourful and interactive.
   Add LinkedIn profile links of each member on Team Profile pages.
   Design and provide Admin Pages for Team Profiles in next Sprint.
2. Shift "contact us" link form the footer to Navbar (Heater).
3. Adjust the pictures and ISTQB logos in Home Pages.
4. Add "share to social media (Twitter/Facebook) function" on Success Story List Pages and Success Story Detail Pages.

According to PO's suggestions, we will adjust our project by the end of this Sprint on September 18th Fri.

Retrospective

Clay: In this sprint I initiated the layout of the website using Bootstrap framework and carefully crafted the home page, success story list page and success story detail page. I have developed model class, controller and views for success story list and success story detail. By pair programming with Kaii, I have learned to develop controller in a very short time.

Likai: In this sprint, I focused on the mobile friendly static webpage. I designed a successful story list static webpage and work with Clay in FAQ page and Team Profile page. It is my first time to design a webpage and I already prepare some new knowledge (such as how to make a dynamic page) for the next sprint.

Irene: In this sprint, I put more efforts on writing test cases and unit tests by using NUnit. I have also gained some experience of mobile-friendly website development. By following agile development processes, I've been taught lots of useful knowledge and gained experiences from our group members.

V: By following the scrum, I played several different roles within one project, which is interesting one, which cannot be achieved in normal waterfall method. For example, some days as a Scrum master, some days DBA, some day's software developer, some day's Business Analyst which gives a feel of I had a full meals (Indian Food variety,

with many items in the content).

Miranda: At first, I designed and built the database with V. Then I designed two login pages for choice and developed login pages for Admin with Shawn. In addition, I wrote test cases for admin pages and successstory pages with Lulu. I really learned a lot in this sprint and I hope I can do more work in the next sprint.

Kaii: Acted as scrum master in the first half of sprint one, assist the team in sprint meeting, system architecture, DB design, as well as the initialization of scrum board. Responded for the admin functions of success story and NUnite testing environment. Applied daily scum, estimation game, simple design, pair programming, small release, refactoring and coding standards to our project.

Lulu: For the first sprint, I built some models and designed several dynamic pages including about.chtml, contact.chtml and create.chtml. Besides, I completed test cases for AccountController and SuccessStoryController with Miranda. Finally, I wrote the prototype document with Irene and Miranda. Overall, I learned a lot in the process and tried to make contribution as much as possible.

Shawn: I organized solution in MVC architecture with demo codes. It's widely used by the whole team. I also built and configured a remote Azure server and a remote MySQL server to support team demo. Layout template, included a footer and a header for front web page, is developed by myself. Miranda and I cooperated on developing login page for Admins.

Group Evaluation:

In general, our group did a good job for the first sprint. We defined a reasonable sprint backlog and followed SCRUM process strictly. Everyone got one task at first and after finished it he/she could get another task. We held stand-up meetings regularly so that we could know each other's progress and obstacles. If anyone had a problem, others would help him/her. Some of us did not have programming experience before, so their progress might be slow. But everyone tried to finish the tasks as soon as possible and make the project perfect. Besides, every scrum master communicated with our customer as much as possible to ensure that the project could meet the demands.