# **SPEEDY SITTER**

# COMP 5423 SOFTWARE ENGINEERING PROCESSES SPRINT 4 PROJECT REPORT

Instructor: Dr. Akhtar Lodgher

**Prepared & Submitted by** 

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#### 1 INTRODUCTION

As a requirement our Software Engineering Process course, we are supposed to develop software as our final project. While developing this project, we have to follow the software engineering process that we are taught in this course so that we practically get to learn about the processes that are followed in the paradigm of software engineering.

For this purpose, we chose to develop a web-based software service named Speedy Sitter. According to course requirement, we are following the agile software engineering method SCRUM for developing this.

As per SCRUM method, we have to deliver a Sprint of this project in every 3-4 weeks. This report is the documentation of the Sprint 4 of this project delivery

Speedy Sitter is basically a web-based service that will provide service to find near-by baby-sitting opportunity for the free-lancer baby sitters and parents. By using this service, baby sitters will be able to find baby-sitting opportunities offered near-by their suitable places. The parents will also be able to find the baby-sitters who live near-by their living places and available to serve them at their requested time.

#### 1.1 TASK COMPLETED SPRINT 1

In Sprint 1, the tasks we covered:

- Finalized the project topic
- Requirements gathering
- Got used to scrum tool & repository
- Created User stories, UML diagrams, swim lane diagram
- Finalized User Interface design
- Implemented login, register page

#### 1.2 TASK COMPLETED SPRINT 2

In Sprint 2 we have completed the following tasks

- Completed all the user stories
- Created activity, architecture, database, class and component diagrams
- UI screens for rest of our system.
- The weekly scrum sheets
- Maintained the scrum tool and code in GitHub
- o Created person, address and database classes from their respective interfaces

 Developed one major functional module by converting users address to Lat/Long (Using Google API geo coder)

#### 1.3 TASK COMPLETED SPRINT 3

In Sprint 3 we have completed the following tasks

- Completed all the user stories
- Created activity, architecture, database, class and component diagrams
- UI screens for rest of our system.
- The weekly scrum sheets
- o Maintained the scrum tool and code in GitHub
- Created person, address and database classes from their respective interfaces
- o Completed all the user interfaces
- o Completed address calculation, login, registration, find nearby address modules
- Working on request/find preferred service module

#### 1.3 TASK COMPLETED SPRINT 4

In Sprint 3 we have completed the following tasks

- Completed all the user stories
- o Created activity, architecture, database, class and component diagrams
- UI screens for rest of our system.
- The weekly scrum sheets
- Maintained the scrum tool and code in GitHub
- Created person, address and database classes from their respective interfaces
- Completed all the user interfaces
- o Completed address calculation, login, registration, find nearby address modules
- Completed request module
- Integrated codes
- Hosted in remote server

## 2. USER STORIES

# 2.1 MAKE A NEW BABY SITTING REQUEST

Scenario Name: Make a new request Date: 11/30/16

Priority: High

Priority: High

Goals/purpose: To make a new baby sitting request

Preconditions: Should be logged in 8 enter child information

Scenario steps: O user login to system

(a) Go to service tab

(b) click on make new request

(c) fill the form compleatly

(3) submit the form

Exceptions:

(a) wrong children information error

(b) server error.

# 2.2 FIND BABY SITTING REQUEST

Scenario Name: find babysitting request priority: High

Primary /secondary Adors: Babysitter

Goals/purpose: find Babysitting request according to desired

Aate

Preconditions: shouldbelogged in,

Scenario steps: Dusar login to system

(a) Go to service tab

(b) Go to service tab

(c) Click on Sequest service tab

(d) scleet date and click on submit

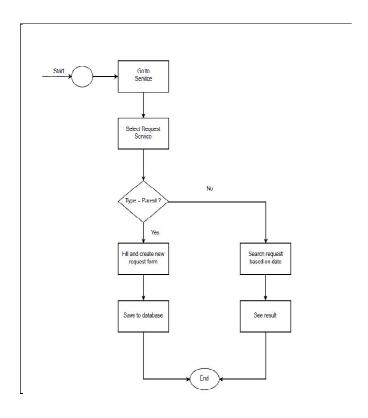
(e) Based on the requested date, list of requests

```
Exceptions:

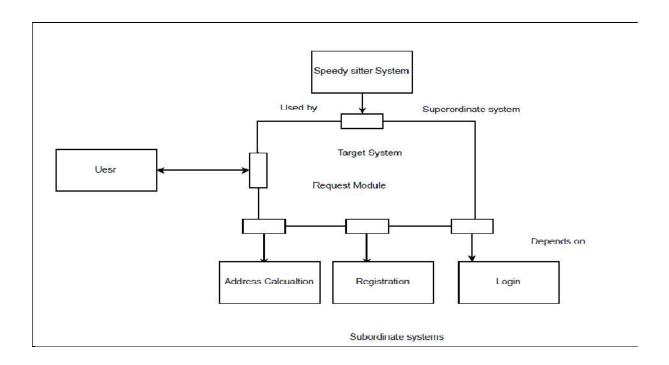
① Server error
②
```

# 3. DIAGRAMS

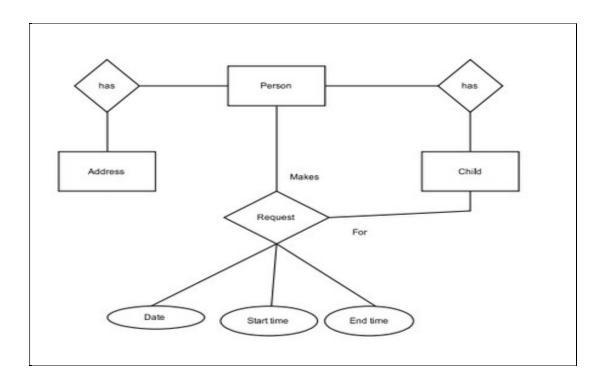
## **3.1 ACTIVITY DIAGRAM**



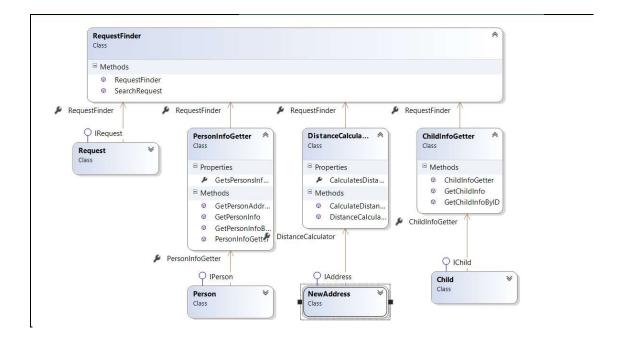
## 3.2 ARCHITECTURE DIAGRAM



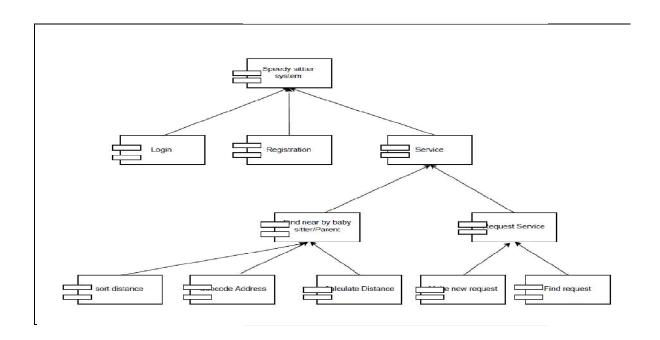
## 3.3 DATABASE DESIGN



## 3.4 CLASS DIAGRAM



## 3.5 COMPONENT DIAGRAM



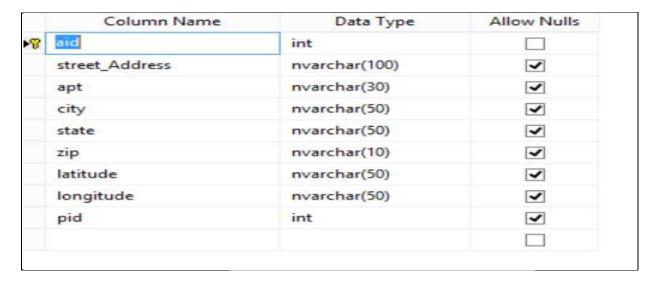
## 3.6 MATRIX MODULE

Module	Persons	Rank	Reasons						
Name	ln	For S	For O	For L	For I	For D	For	For	for your
	Charge	(1-10)	(1-10)	(1-10)	(1-10)	(1-10)	Cohesi	Couplin	ranking fo
							on	g	each of
							(1-10)	(1-10)	the
		2 2							columns
Module 1	Anitha	10	10	8	10	10	8	8	only
Login									depends
									on
									registratio
									n
Module 2	Ashwaja	10	8	8	10	10	10	10	Doesn't
Registrati									depends
on									on
Brown Harring and		8					150000		anything
Module 3	Anitha	9	8	8	10	10	10	10	Doesn't
Address	Ashwaja								depends
Calculatio	Tanzila								on
n									anything
Module 4	Tranzila	9	10	8	9	10	8	8	Depend or
Find near									Login &
by									address
address									calculation
Module 5	Tanzila	9	9	8	9	7	7	7	Depends
Request/									on Login
Find									&near by
Service									address

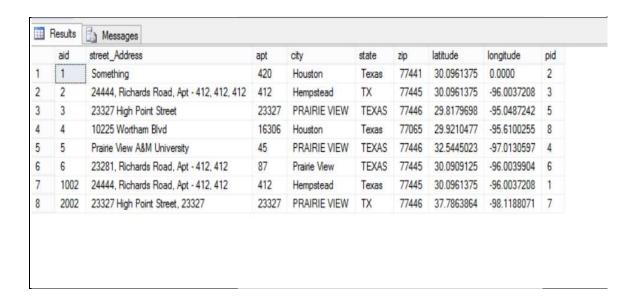
#### 4. DATABASE DESIGN AND CONNECTIVITY

#### **4.1 DATABASE DESIGN AND TABLES**

#### **Address Design**



#### **Address Table**



#### **Child Design**

	Column Name	Data Type	Allow Nulls
B	cid	int	
	fname	nvarchar(100)	
	Iname	nvarchar(100)	
	sex	nchar(10)	
	DOB	date	
	specialNeed	varchar(500)	
	pid	int	

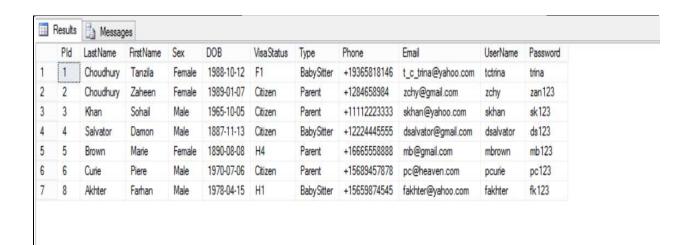
## **Child Table**

	cid	fname	Iname	sex	DOB	specialNeed	pid
1	1	Sarina	Khan	Female	2011-09-26	Hyper Active	3
2	2	Aizah	Choudhury	Female	2016-01-07	Shy, Antisocial	2
3	3	Sahal	Khan	Male	2008-05-06	None	3
4	4	Max	Brown	Male	2009-08-08	Hyperactive	5

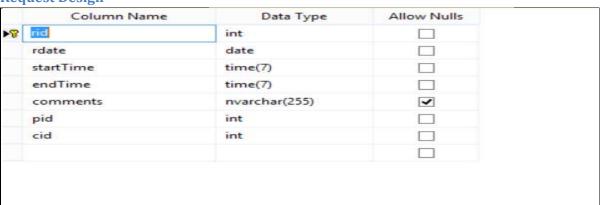
# **Person Design**

	Column Name	Data Type	Allow Nulls
8 [	PId	int	
1	LastName	nvarchar(100)	
1	FirstName	nvarchar(100)	
-	Sex	nchar(10)	
1	DOB	date	
3	VisaStatus	nvarchar(50)	
1 9	Туре	nchar(10)	
1	Phone	nvarchar(50)	
1	Email	nvarchar(150)	
1	UserName	nvarchar(50)	~
1	Password	nvarchar(50)	~

#### **Person Table**



#### **Request Design**



#### **Request Table**



#### **4.2 SQL QUERIES**

```
"UPDATE Address SET street_Address="" + this.Street1 + "", apt="" + this.Street2 + "", city="" + this.City +
"', state='" + this.State + "', zip='" + this.Zip + "', latitude='" + this.Lat.ToString() + "', longitude='" +
this.Lon.ToString() + "' WHERE pid="+pid+"";
"insert into Address(street_Address, apt, city, state, zip, latitude, longitude, pid)values('" + this.Street1 +
"',"" + this.Street2 + "',"" + this.City + "',"" + this.State + "',"" + this.Zip + "',"" + this.Lat.ToString() + "',"" +
this.Lon.ToString() + "', "+pid+")";
"SELECT * FROM Persons WHERE PId=" + pid + "";
"SELECT * FROM Persons WHERE UserName="" + uname + """;
"SELECT * FROM Address WHERE PId=" + pid + "";
"SELECT * FROM Child WHERE PId=" + pid + "";
"SELECT * FROM Child WHERE cid=" + cid + "";
"SELECT * FROM Child WHERE pid=" + pid + " AND fname LIKE "" + fname + """;
"SELECT * FROM Address";
"insert into Request(rdate, startTime, endTime, comments, pid, cid)values("" + R.RDate + "',"" +
R.StartTime + "'," + R.EndTime + "'," + R.Comments + "'," + R.Pid + "'," + R.Cid + "')";
"SELECT * FROM Request WHERE rdate=""+demoreg.RDate+"";
"insert into Child( Iname, fname, sex, DOB, specialNeed, pid)values(" + TextBox2.Text.ToString() + "'," +
TextBox1.Text.ToString() + "'," + DropDownList1.Text.ToString() + "'," + TextBox3.Text.ToString() + "'," +
TextBox4.Text.ToString() + "', '"+CurrenntUser.Pid+"')";
"select count(*) from Persons where FirstName="" + txtfirstname.Text.ToString() + "' and UserName ="" +
txtusername.Text + "";
"Update Persons set Password="" + txtpassword.Text + "' where Firstname = "" + txtfirstname.Text + ""
and UserName="" + txtusername.Text + """;
"select count(*) from Persons where UserName="" + txtname.Text.ToString() + "' and Password
=""+txtpassword.Text+""";
```

```
"insert into Persons( LastName, FirstName, Sex, DOB, VisaStatus,Type,Phone, Email)values("" + TextBoxLname.Text.ToString() + "","" + TextBoxFname.Text.ToString() + "","" + DropDownListsex.Text.ToString() + "","" + TextBoxDob.Text.ToString() + "","" + DropDownListVisa.Text.ToString() + "","" + DropDownListUsertype.Text.ToString() + "","" + TextBoxPhone.Text.ToString() + "","" + TextBox1.Text.ToString() + "")";

SQL Queries.txt
Displaying SQL Queries.txt.
```

#### 5. WORKING CODE

#### **5.1 SAMPLE CODE**

```
/*******************************RequestFinder Class (Single Responsibility Principle implemented
here) ******************************/
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Data;
using System.Drawing;
using System.Ling;
using System.Text;
using System.Threading.Tasks;
//using System.Windows.Forms;
using System.Data.SqlClient;
/// <summary>
/// RequestFinder is SRP class that has the method to find all the requests that match date or time of a
given request search
/// Author: Tanzila
public class RequestFinder
 public RequestFinder()
```

```
//
    // TODO: Add constructor logic here
    //
  }
  public static Request[] SearchRequest(Request demoreq, Request[] R)
    try
    {
      int i = 0;
     // R = new Request[0];
      SqlConnection con = new SqlConnection(@"Data Source=DAMONNAHARIS\TRINA;Initial
Catalog=TestDB1;Integrated Security=True");
      con.Open();
      if (con.State == System.Data.ConnectionState.Open)
        Console.WriteLine("connected!");
        string q = "SELECT * FROM Request WHERE rdate=""+demoreq.RDate+"";
        SqlCommand cmd = new SqlCommand(q, con);
        cmd.ExecuteNonQuery();
        SqlDataReader reader = cmd.ExecuteReader();
        while (reader.Read())
          Console.WriteLine("Request Select successful!");
          Array.Resize(ref R, R.Length + 1);
          R[i] = new Request();
          R[i].Rid = Int32.Parse(reader.GetSqlValue(0).ToString());
          R[i].RDate = reader.GetSqlValue(1).ToString();
          R[i].StartTime = reader.GetSqlValue(2).ToString();
          R[i].EndTime = reader.GetSqlValue(3).ToString();
          R[i].Comments = reader.GetSqlValue(4).ToString();
          R[i].Pid = Int32.Parse(reader.GetSqlValue(5).ToString());
          R[i].Cid = Int32.Parse(reader.GetSqlValue(6).ToString());
          i++;
        }
        return R;
```

```
else
        return null;
    }
    catch (Exception ex)
      Console.WriteLine(ex.Message);
      Console.WriteLine("Press any key to terminate..");
      Console.ReadKey();
      Environment.Exit(0);
      return null;
    }
 }
/******************************** PersonInfoGetter Class (Implements Open Close
Principle)*************///
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Ling;
using System.Text;
using System.Threading.Tasks;
//using System.Windows.Forms;
using System.Data.SqlClient;
/// <summary>
/// This class is for get information of a person given the pid
/// author: Anitha, Ashvija, Tanzila
/// </summary>
public class PersonInfoGetter
{
public static Person GetPersonInfo(int pid)
    try
      Person p = new Person();
```

SqlConnection con = new SqlConnection(@"Data Source=DAMONNAHARIS\TRINA;Initial Catalog=TestDB1;Integrated Security=True");

```
con.Open();
  if (con.State == System.Data.ConnectionState.Open)
  {
    Console.WriteLine("Connection made\n");
    string q = "SELECT * FROM Persons WHERE PId=" + pid + "";
    SqlCommand cmd = new SqlCommand(q, con);
    cmd.ExecuteNonQuery();
    SqlDataReader reader = cmd.ExecuteReader();
    while (reader.Read())
      Console.WriteLine("Select successful!");
      p.Pid = Int32.Parse(reader.GetSqlValue(0).ToString());
      Console.WriteLine(p.Pid);
      p.FName = reader.GetString(2);
      p.LName = reader.GetString(1);
      Console.WriteLine(p.FName + " " + p.LName);
      p.Sex = reader.GetString(3);
      Console.WriteLine(p.Sex);
      p.VisaStatus = reader.GetString(5);
      Console.WriteLine(p.VisaStatus);
      p.Type = reader.GetSqlValue(6).ToString();
      Console.WriteLine(p.Type);
      p.Phone = reader.GetString(7);
      p.Email = reader.GetString(8);
      p.UserName = reader.GetString(9);
      p.Password = reader.GetString(10);
      Console.WriteLine(p.Phone + " " + p.Email);
   }
 }
  return p;
catch(Exception ex)
  Console.WriteLine(ex.Message);
  Console.WriteLine("Press any key to terminate..");
  Console.ReadKey();
  Environment.Exit(0);
  return null;
```

}

}

```
}
  public static Person GetPersonInfoByUsername(string uname)
  {
    try
    {
      Person p = new Person();
      SqlConnection con = new SqlConnection(@"Data Source=DAMONNAHARIS\TRINA;Initial
Catalog=TestDB1;Integrated Security=True");
      con.Open();
      if (con.State == System.Data.ConnectionState.Open)
      {
        Console.WriteLine("Connection made\n");
        string q = "SELECT * FROM Persons WHERE UserName="" + uname + """;
        SqlCommand cmd = new SqlCommand(q, con);
        cmd.ExecuteNonQuery();
        SqlDataReader reader = cmd.ExecuteReader();
        while (reader.Read())
          Console.WriteLine("Select successful!");
          p.Pid = Int32.Parse(reader.GetSqlValue(0).ToString());
          Console.WriteLine(p.Pid);
          p.FName = reader.GetString(2);
          p.LName = reader.GetString(1);
          Console.WriteLine(p.FName + " " + p.LName);
          p.Sex = reader.GetString(3);
          Console.WriteLine(p.Sex);
          p.VisaStatus = reader.GetString(5);
          Console.WriteLine(p.VisaStatus);
          p.Type = reader.GetSqlValue(6).ToString();
          Console.WriteLine(p.Type);
          p.Phone = reader.GetString(7);
          p.Email = reader.GetString(8);
          p.UserName = reader.GetString(9);
          p.Password = reader.GetString(10);
          Console.WriteLine(p.Phone + " " + p.Email);
      return p;
```

```
catch (Exception ex)
      Console.WriteLine(ex.Message);
      Console.WriteLine("Press any key to terminate..");
      Console.ReadKey();
      Environment.Exit(0);
      return null;
    }
  }
  public static NewAddress GetPersonAddress(int pid)
    try
      NewAddress UserAddress = new NewAddress();
      SqlConnection con = new SqlConnection(@"Data Source=DAMONNAHARIS\TRINA;Initial
Catalog=TestDB1;Integrated Security=True");
      con.Open();
      if (con.State == System.Data.ConnectionState.Open)
        Console.WriteLine("Connection made\n");
        string q = "SELECT * FROM Address WHERE PId=" + pid + "";
        SqlCommand cmd = new SqlCommand(q, con);
        cmd.ExecuteNonQuery();
        SqlDataReader reader = cmd.ExecuteReader();
        while (reader.Read())
          UserAddress.Id = Int32.Parse(reader.GetSqlValue(0).ToString());
          UserAddress.Lat = Double.Parse(reader.GetString(6));
          UserAddress.Lon = Double.Parse(reader.GetString(7));
          UserAddress.Street1 = reader.GetString(1);
          UserAddress.Street2 = reader.GetString(2);
          UserAddress.City = reader.GetString(3);
          UserAddress.State = reader.GetString(4);
          UserAddress.Zip = reader.GetString(5);
          UserAddress.Pid = Int32.Parse(reader.GetSqlValue(8).ToString());
        }
```

```
return UserAddress;

}

catch (Exception ex)
{
    Console.WriteLine(ex.Message);
    Console.WriteLine("Press any key to terminate..");
    Console.ReadKey();
    Environment.Exit(0);
    return null;
}

public PersonInfoGetter()
{
    //
    // TODO: Add constructor logic here
    //
}
```

## **5.2 SCREEN SHOTS OF USER INTERFACE**

## **Login Page**



## **Registration Page**



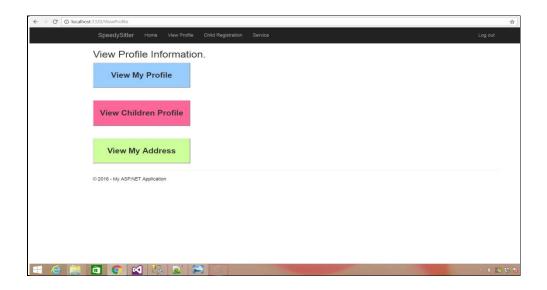
## **Username Registration Page**



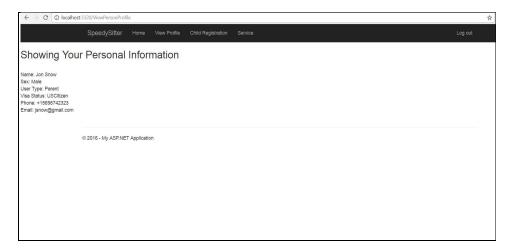
## **Home Page**



# **View profile information Page**



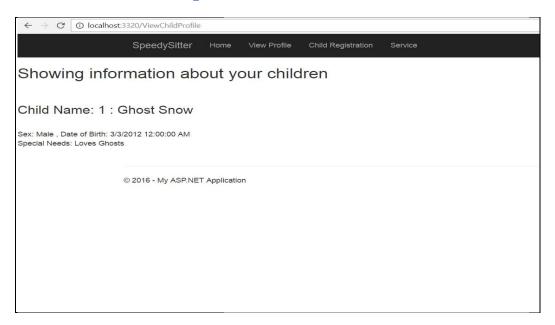
## **Personal information Page**



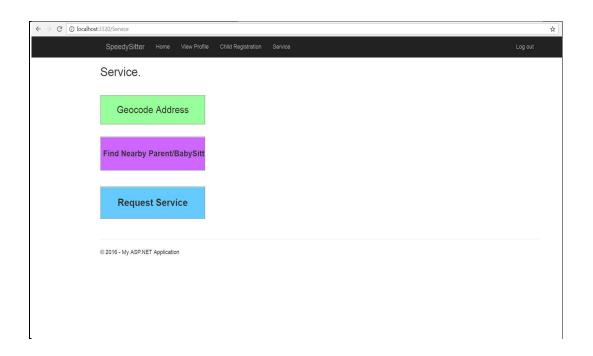
## **Enter child information Page**



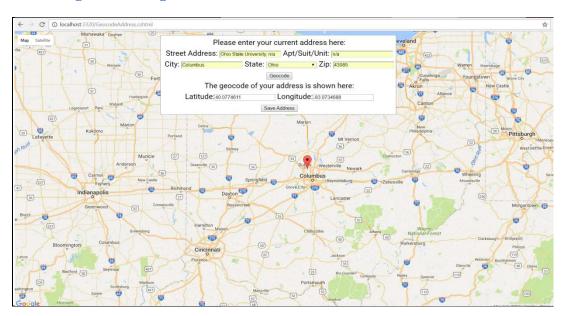
## **Show child information Page**



## **Service Page**



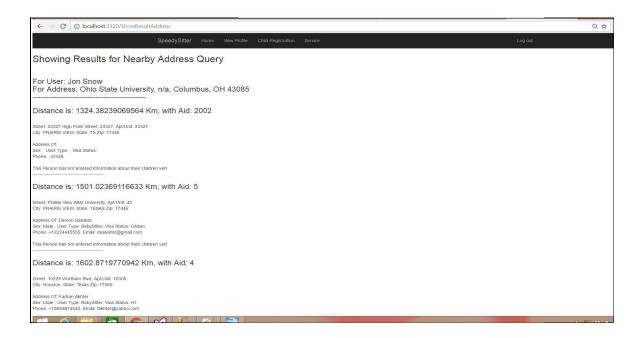
## **Geocoding address Page**



## **Showing lat long page**



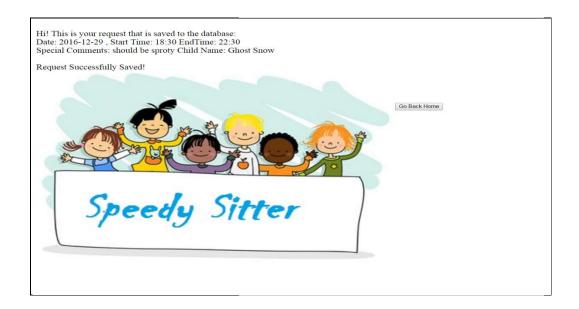
## Showing results for nearby address page



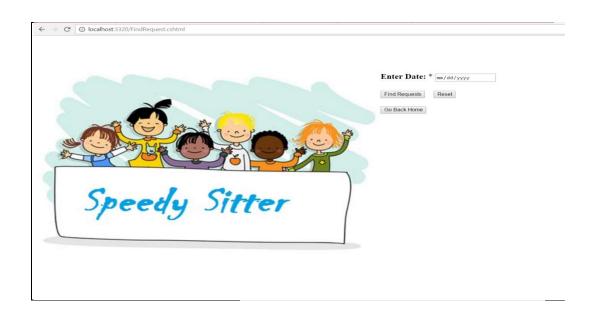
### Create new request page



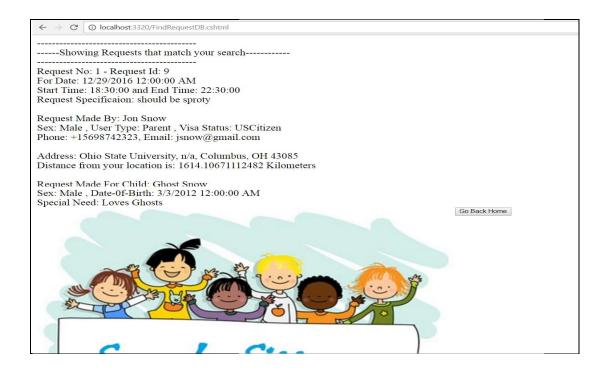
## **Request saving page**



## **Find Request page**



## **Showing Requested results page**



## 6. WEEKLY PROGRESS

To monitor our weekly progress, we maintained Scrum sheets. Below are the snapshots of the scrum sheets.

# 6.1 WEEK 1

This form must list the date of each w questions that the Scrum Master mus form WILL contribute towards indiv entire team. This form MUST be subs Each team will project this form in cla Project Name:	t ask each tear idual member mitted to the ir	n member ev grade change structor EV their progres	ery day. All es. Incorrect ERY week b ss in class ea	members MU t information ov the SM to the	ST sign the fo WILL lead to ne instructor a	orm. Entries grade degra at beginning	in this dation of
Date of each week:	1 /17/16						11/23/16
Master Name: Tangila	SM: All t	asks accom	plished?:	Yes No	SM Sign:	Trim	
Tasks Assigned for the week:	1 Co 8	e Ded	2) Regu	equest Module			
What did you do?	0	0	0	0	2	2	2
What obstacles you had?	MIN	NIK	NA	N/A	NIA	N/A	N/A
What do you plan to achieve?	0	0	2	(2)	0	2	Integration
Date of each week:	11 /17/16		11 //2/16			11 /24 16	11/29/16
Member 2 Name: Anilla		asks accon			Mem 2 Sig		
Tasks Assigned for the week:  What did you do?	(1) (2)	de Ju	tegrati	en 2	Susion	Hand	ling
	0	(1)	2)	2)	2)	2	2)
What obstacles you had?	AIR	MIA	Demons	MA	N/A	N/A	N/A -
	0	2	2	2	2	2	Tutegration
What do you plan to achieve?							
What do you plan to achieve?  Date of each week:	11/12/16	11 /18/ 16	11/19/16		11/21/16	W /224 16	11/23/16
Date of each week: Member 3 Name: Ash vija	SM: All t	asks accon	nplished?		Mem 3 Sig	n: عليا	-
Date of each week: Member 3 Name: Ash vij a Tasks Assigned for the week:	SM: All t	asks accon	nplished?	: Yes No	Mem 3 Sig	n: عليا	NE O
	SM: All t	asks accon	nplished?	: Yes No	Mem 3 Sig	n: عليا	NE O

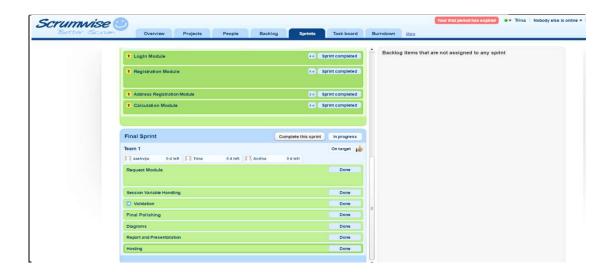
# **6.2 WEEK 2**

This form must list the date of each v	23 Software 2016 SCRUI	M MASTER	team mem	WEEKLY F	ORM ek, and the a	nswers to the	three
questions that the Scrum Master mus form WILL contribute towards indiv entire team. This form MUST be sub Each team will project this form in cl	idual member mitted to the i	grade chang instructor EV	ERV week	t information by the SM to	WILL lead t	to grade degr	adation of
Project Name:		Tim	e set for c	all / meetin			AM PM
Date of each week:  Master Name: Tanal A	PH2416	11 /25/16		The state of the s	11 28+16		11/3/16
Tasks Assigned for the week:	(D) Ge	1	stegna:	tion (	D Syste		lizati
What did you do?	0	0	0	0	0	0	2
What obstacles you had?	01/1	NIK	N/A	NA	N/A	N/A	NIA
What do you plan to achieve?	0	0	0	0	2	2	Sulow
Date of each week:	11/24/16	N /257 16	11 /24/16	D/20+16	11/8/16	11 20/16	11/30/ 16
Member 2 Name: Anitha	SM: All t	asks accon	plished?:	Ves No	Mem 2 Sig	gn: U-Acit	to du
Tasks Assigned for the week:	1 8y	stom	Ana	lizati	on (2	Dep	mt
What did you do?	0	0	0	0	2	0	2
What obstacles you had?	MA	NA	N/A	WA	N/A	NA	81/1
What do you plan to achieve?	0	0	(1)	5	2	2	Subi
Date of each week:		N 1297 16			11/26/16	11 /29/16	4/30/1
Member 3 Name: Advisor Tasks Assigned for the week:	00	emot		ostine	Mem 3 Si	gn: Arabu	<u> </u>
What did you do?	0	0	0	(1)	0	0	(1)
What obstacles you had?	eounation of	Hosteral	NA	NIA	AIA	VA	WI
What do you plan to achieve?	00	(1)	(1)	(n)	(1)	(1)	- Subr

## 7. SCRUM TOOL PROGRESS SNAPSHOTS

We are also using scrum tool Scrum wise for monitoring our task management of this project. Below is given the snapshots of that tool for sprint 4.







#### 8. GITHUB SOFTWARE RESPIRATORY PROGRESS SNAPSHOT



## 9. REMOTE HOSTING

Please go to the fallowing link to access our system from any hosting machine

http://www.speedysitters.org

## 10. REFERENCES

- W3 Schools website, url: <a href="http://www.w3schools.com/html/html">http://www.w3schools.com/html/html</a> css.asp
- YouTube tutorial C# for beginners,
   URL: <a href="https://www.tutorialspoint.com/csharp/">https://www.tutorialspoint.com/csharp/</a>
- W3 Schools website, url: http://www.w3schools.com/asp/default.asp
- Scrum tool website, url: <a href="http://www.scrumwise.com/">http://www.scrumwise.com/</a>
- Github Repository: url: https://github.com/