**RestaurantFinder**

**Makes Easy Restaurant Reservations**

Requirements Specification and Analysis

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Table of Contents

[1. Introduction 1](#_Toc454450626)

[1.1. Purpose of the System 1](#_Toc454450627)

[1.2. Scope of the System 1](#_Toc454450628)

[1.3. Objectives and Success Criteria of the Project 1](#_Toc454450629)

[1.4. Definitions, Acronyms, and Abbreviations 2](#_Toc454450630)

[1.5. Overview 2](#_Toc454450631)

[2. Current System 3](#_Toc454450632)

[3. Proposed System 4](#_Toc454450633)

[3.1. Overview 4](#_Toc454450634)

[3.2. Functional Requirements 5](#_Toc454450635)

[3.3. Nonfunctional Requirements 5](#_Toc454450636)

[3.4. System Models 6](#_Toc454450637)

[Scenarios 6](#_Toc454450638)

[Use case model 9](#_Toc454450639)

[Object model 22](#_Toc454450640)

[Dynamic model 23](#_Toc454450641)

[User interface-draft 26](#_Toc454450642)

[4. Glossary 28](#_Toc454450643)

[5. References 29](#_Toc454450644)

REQUIREMENTS ANALYSIS DOCUMENT[1]

**1.Introduction**

**Purpose of the System**

The main purpose of this system is to create a web site for the restaurants which they are representing for the user who they can make a reservation. It helps users to easily find restaurants and take a look at informations about restaurant. And also users can keep their past reservations on the system.

**Scope of the System**

RestaurantFinder is a web site designed for people who wants to make a easily reservation for their favorite restaurants and also they can try and discover new restaurants. Our users will be able to view and read restaurants such as their telephones, photos, addresses and descriptions. Also users can be search restaurants using by categories and find restaurants using cities.

**Objectives and Success Criteria of the Project**

Below are the few objectives of the system;

* Manage restaurants by categories and by cities.
* A search function on the web site by a restaurant name or a city name.
* Let users make reservation to restaurants and save them.
* Users using login to access their past reservations.

Success criteria of RestaurantFinder is a web site where users can search restaurants to make a reservation which is very effectively. Users might be use this web site fluently.

**Definitions, Acronyms and Abbreviations**

RAD: Requirements Anaysis Document

Rest of the RAD will contain information about the aim of the web site. Followed by the functional and nonfunctional requirements, the web site models and some examples of the user interface can be set.

Sections of the RAD are described:

* Proposed System

Main functions and features about web site is described. Both functional and nonfunctional features are explained.

* Overview

Web site's information and functions are described.

* Functional Requirements

What our users doing on the web site and what they don't.

* Nonfunctional Requirements

Parts of our web site which are Usability, Reliability and Performance.

* System Models

This part about scenarious and use cases to make a ideas of web site which name is RestaurantFinder.

* Object Model

This part about class diagram of the web site which is the relations of the classes.

* Dynamic Model

This part about sequence and state diagrams to show rlations in the web site and how the system launch in which order.

* Glossary

This part about uncertain, ambiguous and undefined words which includes in the web site.

**2.Current System**

In the Internet there are a lot of restaurant reservation systems. The purpose of doing new one is to make a better web site from anothers. After researching other websites, The project team which name is RestauranTeam make a decision. In our websites we can ignore adds which is help user to discover our website in effectively. Because of the adds, the users tap wrong spaces and they do not happy for that. And also the other websites use lots of buttons which they can confused the users. Some websites have not used google maps, so when the user make a reservation to the restaurant, he/she cannot find the restaurant easily. It has not got location service on their websites. On the other hand, design also is the most important part of the web sites. When the web design is very original and professional, then users can use the web site happily and also they can trust all restaurant because of the best vision of the web design.

**3. Proposed System**

RestaurantFinder provides find a restaurant which users want to and make a reservation for it. Users can search new restaurants and take information about them. Also, after register, they can login the system and look their past reservations. In addition restaurants owners can send a form to admin for adding their restaurants into the system and after admin’s confirmation, new restaurants can be added into the system. Also, restaurant owners can edit their restaurants page and information.

**3.1. Overview**

RestaurantFinder allows users easily find a restaurant and make reservation for it. However, users must register and login the system to make reservation. After login the system, they can make reservation and cancel or edit their reservation. Also, there is users profile and they can enter their profile page and look past reservations. Further more, users can search a restaurant by category or city and access its telephones, photos, addresses and descriptions without logging the system. In addition, restaurant owners can arrange their restaurant page.

**3.2. Functional Requirements**

**Register:** To login the system, users must register the system. Users can access our website register form. They complete the form and they register the system.

**Login:** The system does not allow entering without login. To make reservation, users must log in, after that they can be redirected home page. Database has users’ information which is password and username. System should be able to check at each login process user’s username and password from database, so one user has to have one unique

username and password.

**Change password:** All user kind; users, restautantOwner and admin can change password. They login and enter profile page. They click change password and firtly they fill old password after they fill new password.

**List restaurants:** All users can list all restaurants without login. In home page, there is search field by city as well as by category. Users can search restaurant and look its telephones, photos, addresses and descriptions.

**Make reservation:** After users login, they can make reservation. They select a restaurant and enter reservation date, number of people, table option and description. Thus, they make a reservation and the system send mail which contain reservation information to users .

**Cancel reservation:** There is user reservations page. This page list past and future reservation. Cancel button locates next to all future reservation and if users want to cancel reservation, they click this button and reservation is deleted from the system.

**Edit reservation:** If users want to change reservation ınformation, they can edit reservation their reservations page. Edit button locates next to all future reservation. By click this button, users arrange reservation information.

**Request registerForm:** Restaurant owner fill the register form to request to admin for add their restaurant into the system. They click the “join us” in home page and fill the form.

**Approval-Reject restaurant:** There ara request form in request page for admin. Admin enter this page and he/she can approval or reject button. If he/she approvals request, restaurant is added the systam. If he/she rejects request, restaurant can’t be added the sytem.

**Edit RestaurantProfile:** Restaurant owners can arrange their restautant information. After they login the system and enter restaurants page, if they click edit, they change or add information or they arrange restaurant page.

**3.3. Nonfunctional Requirements**

There is some kind of user who are admin, restaurantOwner and user in the

system. Admin has permission for add new restaurant. RestaurantOwners can edit their restaurants page and information. Lastly, users can login the system and make reservation.

***Usability***

The functionality of the system sufficiently maps to general user-requirements. Usability also

refers to how well the user interface is considered easy to use. Our system is simple and easy

to use. To make reservation are not complicated for users.

***Reliability***

The system should not be allowed entry without input username and password for the site.

User’s and restaurant’s information is kept in database system. Also admin has permission for restaurants. Admin can delete or add restaurants.The protection against unauthorized

use password protection.

***Supportability***

Admin creates new restaurant, restaurant owner arranges their restaurant page and users make reservation and look past reservation. However, such additions may require the system.

New modules can added to the system or some operations can be shut down.

***Performance***

Performance requirements are concerned with quantifiable attributes of the system. Response time for our system should be very low. The system have more than one admin for quick response.

***Implementation***

All users should be able to access their profile page after login the system. Admins functions used by the user are not available through the web.

***Legal***

Users can access after register the system.

## System Models

**Scenarios**

*Scenario name* Login

*Participating actor* Sam:User

*instances*

*Flow of events* 1. Sam has a date ,he want to look some restaurant in

İstanbul to make a reservation

2. He writes www.restaurantfinder.com on browser

3. He has an account

4.He wrote his username and password in order to login to the site.

*Scenario name* Register

*Participating actor* Sam:User

*instances*

*Flow of events* 1. Sam’s best friend has a birthday

2. He decided to make a surprise him ,he go in to the site named RestaurantFinder and find a restaurant that makes a good sushi which Sam’s best friends favorite food.

3. He choose that restaurant and want to make a reservation, but he has not have account

4.He registers from main page by clicking sign in

button.

5. He writes all information which is necessary to create an account (name ,surname, phone number , e-mail etc.) from register page.

6.Now he has an account and he can make a reservation.

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*Scenario name* SelectRestaurant

*Participating actor* Sam:User

*instances*

*Flow of events* 1. Sam login to the site named RestaurantFinder

2 .He decides to make a reservation for his anniversary with his girlfriend

3.He selects the city İstanbul and clicks the category named world cuisine to look results

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4 .He see many restaurants as a result ,from them he chose La

Mancha Restaurant and by clicking make reservation button

he makes reservation for two.

*Scenario name* MakeReservation

*Participating actor* Sam, Taylor:User

*instances*

*Flow of events* 1. Sam goes to İzmir for his business , he has business

meeting at night.

2. His assistant Taylor needs to make reservation in one

of the İzmir’s high quality restaurant.

3.She writes [www.restaurantfinder.com](http://www.restaurantfinder.com) on the Safari

and she login the site by using her cell phone.

4.She gets some information from her relatives from İzmir

,they said Köşebaşı Kordon Restaurant is the best choice

for that kind of meeting.

5.She clicks on the restaurant and make reservation.She

selects 4 person and selects 24.06.2016 19:00 as a date

and time

6.Now she has a reservation for his boss.

*Scenario name* requestRegisterForm

*Participating actor* Ed:Restaurant Owner , Dean:Admin

*instances*

*Flow of Events* 1.Ed has a restaurant named GoMongo.

2.He wants to add his restaurant to the site named

RestaurantFinder to get more customer and to known

more.

3.He clicks Wanna Join Us? button and go into Restaurant

Register form page.

4.He fills all spaces with his information. His first name

surname ,address,phone number,work history ,and

restaurant information.

5.He clicks OK button and send his form to the Dean.

6.Dean evaluates Ed’s restaurant information and approves

it.

7.Ed has a restaurant owner status right now he can edit

his restaurant profile from edit profile page.

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*Scenario name* EditRestaurantProfile

*Participating actor* Clark:Restaurant Owner

*instances*

*Flow of Events* 1.Clark has a restaurant in [www.restaurantfinder.com](http://www.restaurantfinder.com) site.

2. He changed his restaurant’s location to another address.

3. He also wants to change the restaurant address from

the system.

4. He logs in the system from main page by entering his

user name and password.

5. He enters Edit button from his profile.

6. He updates the restaurant’s address from restaurant’s

page by writing new address to the address area.

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*Scenario name* RejectrequestRegisterForm

*Participating actor* Clark:User , Tom:Admin

*instances*

*Flow of Events* 1.Clark has a restaurant named EminEv Yemekleri

2.He is new in food community .He wants to spurt.

3.He thinks that if his restaurant becomes a part of

RestaurantFinder community he can grows up easily.

4.He writes [www.restaurantfinder.com](http://www.restaurantfinder.com) on the browser,

and he clicks Wanna Join Us? button.

5.He fills all form with his information and clicks OK.

6. Tom takes Clark’s form and he views his form.

7. Tom thinks that EminEv Yemekleri is not good for

make a reservation, because it is small restaurant and

serves home cooking which is not in RestaurantFinder’s

category.

8.Tom clicks reject button and sending mail to the Clark

which explains this rejection.

9.Clark gets the mail and understands situation. He gives

up this idea maybe he can try another time when he has

big restaurant..

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*Scenario name:* CancelReservation

*Participating actor* David: User

*instances*

*Flow of Events* 1. David has a date in Valentine’s Day

2. He has a account in restaurantfinder

3. He selects Istanbul city and looks results

4. He decides to make reservation in Suada Restaurant according to

results by selecting the date 14.02.2017 and clock 19:00 .

5. David’s date Julie appears urgent job and she calls David to tell that

she would’t come to the date.

6. David has to cancel reservation because he can not go date by

himself

7. He login to system again and by clicking cancel reservation button

he cancels reservation from his profile’s reservations page.

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*Scenario Name:* EditUserProfile

*Participating actor* Selena: User

*Instances*

*Flow of Events:* 1. Selena has a account in [www.restaurantowner.com](http://www.restaurantowner.com) system.

2. Selena’s mobile phone number changes to another telephone line.

3. She wants to updates her mobile phone number from the system.

4. She clicks edit profile button and changes her mobile phone number

from the mobile phone number’s space.

**Use Case Model**

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*Use Case name :* Login

*Participating actors:* Initiated by The User

*Flow of events:* 1.USER enters the site name on the browser

* 1. SYSTEM shows the main page which includes login, sign in, and restaurant searching area according to city that use choice.

2.USER selects the restaurant he/she would like to make

Reservation.

2.1 The SYSTEM requests that the user enter his/her name

and password.

2.2 The USER enters his/her name and password.

2.3 The SYSTEM validates the entered name and password

and logs the user into the system.

*Entry Condition* USER enters login button.

*Exit Condition SYSTEM returns user’s page.*

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*User Case name :* Register

*Participating Actors:* Initiated by The User

*Flow of Events* 1. USER enters [www.restaurantfinder.com](http://www.restaurantfinder.com) on the browser

1.1 SYSTEM shows the main page which includes

restaurant search area , login and sign in button

2.USER enters the sign in button

2.1 SYSTEM displays registers page.

3.USER enters his/her information to the register page.

3.1 The SYSTEM requests that the user enter

his/her name, surname, e-mail address and

password.

3.2 The USER enters his/her name ,surname, e-mail

address and password

3.3 The SYSTEM registers the entered

name, surname ,e-mail address and password.

*Entry Condition* USER enters sign in button.

*Exit Condition* SYSTEM registers the user information to the system database

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*User Case name :* ListRestaurant

*Participating Actors:* Initiated by The User

*Flow of Events* 1. USER enters [www.restaurantfinder.com](http://www.restaurantfinder.com) on the browser

1.1 SYSTEM shows the main page which includes

restaurant search area , login and sign in button

2.USER enters which city button

2.1 SYSTEM shows cities with select option

3.USER select the city that he/she wants.

3.1 SYSTEM returns restaurants according to the

city.

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*Entry Condition* USER enters which city? button.

*Exit Condition* SYSTEM returns restaurants

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| *Use Case Name :* ChooseRestaurant  *Participating Actors:* Initiated by The User  *Flow of Events:* 1. USER enters the site name on the browser.   * 1. The USER selects city that he/she wants to search.   2. SYSTEM returns restaurants.   2. USER selects the restaurant which he/she wants  according to results.  2.1 SYSTEM shows the restaurant’s page  which includes some information about the  restaurant.  *Entry Condition:*  USER selects city  *Exit Condition:*  SYSTEM returns selected restaurant page. |

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*Use Case Name:* MakeReservation

*Participating Actors:* Initiated by The USER

*Flow of Events:*  1. USER enters [www.restaurantfinder.com](http://www.restaurantfinder.com) on the browser

* 1. SYSTEM displays main page which includes login, sign in ,

and restaurant search area.

2. USER selects city and finds the restaurant that he/she wants to

make reservation.

2.1 SYSTEM requests that the user enter his/her name

and password.

2.2 USER enters his/her user name and password.

2.3 SYSTEM requests that the user enters number of persons

and selects , date & time.

2.4 USER enters number of persons and selects date and

time.

2.5 SYSTEM confirms the reservation.

*Entry Condition:* USER clicks make reservation from selected restaurant page and USER

should be login first.

*Exit Condition:* SYSTEM confirms the reservation

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*Use Case Name :* CancelReservation

*Participating Actors:* Initiated by USER

*Flow of Events:* 1. USER enter reservations field from his/her profile

1.1 SYSTEM returns all reservations making by the User

2. USER selects current reservation and clicks cancel

*Entry Condition :*  USER should be login first and USER clicks cancel button

*Exit Condition:* SYSTEM shows “successfully canceled” message to the User

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*Use Case Name:* EditProfile

*Participating Actors: Initiated by The USER*

*Flow of Events:* 1.USER enters [www.restaurantfinder.com](http://www.restaurantfinder.com) on the browser.

* 1. SYSTEM displays main page

2. USER clicks login button.

2.1 SYSTEM displays login page which includes user name

and password.

2.2 USER enters his/her user name and password.

2.3 SYSTEM displays the user’s profile

3. USER clicks EditProfile button.

3.1 SYSTEM displays user’s information which are name,

surname, address, e-mail address, and phone number

3.2 USER makes some changes and clicks Save Changes

button.

3.3 SYSTEM makes changes.

*Entry Condition:* USER login the system and USER clicks edit profile

*Exit Condition:* SYSTEM makes changes

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*Use Case name:* EditRestaurantProfile

*Participating Actors:* Initiated by restaurantOwner

*Flow of Events:* 1. RESTAURANT OWNER login to the site by entering his/her user

name and password.

1.1 SYSTEM displays his/her restaurant page

2. RESTAURANT OWNER clicks Edit Restaurant Profile button

2.1 SYSTEM shows the restaurant’s information page

2.2 RESTAURANT OWNER makes some changes about

his/her restaurant information.

2.3 SYSTEM saves changes.

*Entry Condition:* RESTAURANT OWNER login the system and clicks edit restaurant

profile

*Exit Condition:* SYSTEM makes changes.

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*Use Case Name :*  requestRegisterForm

*Participating Actors:* Initiated by Restaurant Owner and Admin

*Flow of Events:* 1. RESTAURANT OWNER wants to add his/her restaurant to the

[www.restaurantfinder.com](http://www.restaurantfinder.com) .

* 1. Restaurant Owner clicks Wanna Join Us? button from main page.
  2. SYSTEM displays participation form and requests that the Restaurant Owner enters participation form
  3. RESTAURANT OWNER fills the form which includes Owner name -surname, phone number ,job, mail address, restaurant history , restaurant category, and restaurant information.
  4. RESTAURANT OWNER clicks send form

2. Admin takes the form

2.1 Admin views the form and he/she evaluates the restaurant

that it can be part of restaurantfinder.

2.2 Admin gives response to the owner.

*Entry Condition:* RESTAURANT OWNER clicks Wanna Join Us? button

*Exit Condition:* RESTAURANT OWNER sends the form

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*Use Case Name:* ApproveRestaurant

*Participating Actors:* Initiated by Admin

*Flow of Events:* 1. Admin login the system

* 1. He/ She looks incoming request
  2. He/ She evaluates the form
  3. He/ She clicks approve at the end of the form

*Entry Condition:*  Admin clicks APPROVE button.

*Exit Condition:* SYSTEM adds the restaurant to the restaurantfinder database

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*Use Case Name:* RejectRestaurant

*Participating Actors:* Initiated by Admin

*Flow of Events:* 1. Admin login the site

* 1. He/ She clicks incoming requests.
  2. He /She evaluates the form
  3. He/she clicks reject button at the end of the form.

*Entry Condition:* Admin Clicks REJECT button

*Exit Condition: -*

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*Use Case Name:* AddRestaurant

Participating Actors: Initiated by Admin

*Flow of Events:* 1.ADMIN login to the system

2. ADMIN clicks Add Restaurant button

2.1 SYSTEM requests that the admin creates restaurant’s profile

2.2 ADMIN enters restaurant information which are restaurant

name, restaurant location, address , restaurant information and

telephone number.

2.3 ADMIN enters OK

*Entry Condition:* ADMIN adds restaurant

*Exit Condition:* SYSTEM adds the restaurant to the restaurantfinder database.

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*Use Case Name:* Select Category

*Participating Actors*: Initiated by Admin

*Flow of Events:* 1.Admin selects add new category button from his/her profile

2.SYSTEM adds new category in to the restaurantfinder database.

*Entry Condition:* ADMIN clicks add category

*Exit Condition:* SYSTEM adds the category in to database.

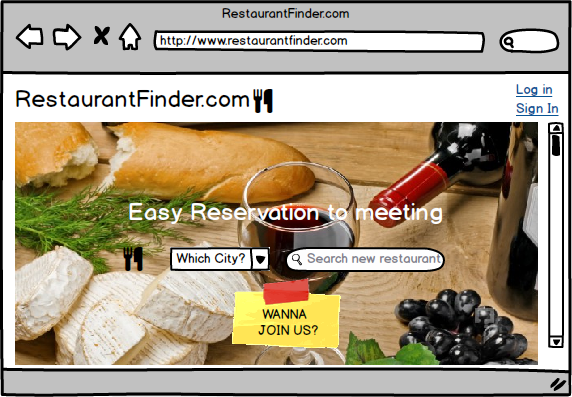
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# Object Model

**Dynamic Model**

**User Interfaces - Sketches**

**Main Page**

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**User Profile**



# 4.Glossary

Restaurant Team : The project group’s name.

RestaurantFinder : The System’s name

Request Register Form : If restaurant owner wants to join the restaurantfinder team. He/she needs to fill register form this form called request register form.

Restaurant page: Includes all information about The Restaurant which are Restaurant name, history, phone number and contact address.

User profile: Includes all information about The User which are user name , surname, user’s phone number, user address and user e-mail address.

Login Page: Contains two text fields; one of them is used for username and the other one used for password. Also the page contains login button.

Register Page: Contains five text fields ; They are used for user name, surname , phone number, address and e-mail. At the end of this page there is also Sign in button.

Which City? : It is a combo box which includes all cities in Turkey.

World Cuisine : It includes all food from the world.

Safari : Special web browser for Iphones.

# 5.References

1. Bruegge B. & Dutoit A.H.. (2010). ​*Object­Oriented Software Engineering Using UML,* *Patterns, and Java​*,Prentice Hall, 3​rded.
2. "5 Steps to Draw a Sequence Diagram. Perf. Visual Paradigm. Youtube. Youtube, n.d. Web. <​https://www.youtube.com/watch?v=18\_kVlQMavE​>.
3. "From Class Diagram to Relation Schema." From Class Diagram to Relation Schema. N.p., n.d.Web.24Feb.2016.<​http://www2.amk.fi/digma.fi/www.amk.fi/opintojaksot/0303011/1146 161367915/1146161783414/1146163048742/1146163155917.html​>.
4. SE301 Course’s slayts added by ASSIST. PROF. EMINE EKIN
5. Innovation in Software Engineering Topic: Sequence Diagram of Hotel Management System < http://www.slideshare.net/mishraasushil/se-15862740>