

Bilkent University

Department of Computer Science



Senior Design Project

KEBAP TYCOON

Project Specification Report

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1. Introduction

Businesses usually have tight set of rules and revolve around scarce resource allocation. Thus, in a way, maintaining a business in real world already is a sort of game. Consequently, if one wants to play that game, it's actually much easier to just turn on an electronic device and play one of the many great business tycoon simulations.

Within this genre, there are numerous games from different industrial areas and food is one of them. However, none of them is local and represents Turkish way of food. This is why we decided to build a Turkish food business game, Kebab Tycoon namely. This game will represent humorous sides of Turkish food and restaurant culture in which Turkish people can adore.

1.1 Description

Our senior design project is a cross platform application called Kebab Tycoon which is a challenging game where players can establish their restaurant chains and put effort to be the best in this sector by making decisions on both preferences of sales and locality strategies. The target user group will mostly be the residences of Turkey as the game will represent instantaneous aspects of Turkish culture. Players will have to register before playing the game at the very beginning. After starting the game with a small meatball booth, players will be able to enhance their businesses up to grand restaurant chains of Turkish kebab. Within this business improvement process, players will be able to see and pursue other restaurant owners in their server instance in order to create a competition environment in the game as well as by virtue of Facebook login option; players will have the opportunity of being in a competitive game ambience where they can invite their friends on Facebook.

1.2 Constraints

1.2.1 Social Constraints

- The game will usually be played as a single player game.
- Players will be able to see what other players do which is a multiplayer function of the game i.e. the number of restaurants they have or how well their businesses are going.

1.2.2 Reliability Constraints

- The game allows only one account for one user and it will ensure this via email or Facebook account confirmations.
- Users will have passwords to login to the game.
- User information will be protected by the game.

1.2.3 Sustainability Constraints

- The bugs and glitches in the game will be fixed as soon as possible.
- Using the player feedback and anonymous data collection, the game will be continuously improved on.

1.2.4 Economic Constraints

- The information about the users and their game status will kept in a cloud environment, thus the main expense will be the cloud technologies.
- There will be a cost to enter the application markets for our targeted platforms.
- The game will also have its own website in order to increase the exposure, so there will be a cost to keep the domain and the webhost running.

1.2.5 Security Constraints

- Personal information of users required in registration session will be kept safe.
- Personal information will not be shared with other players or third parties.
- User passwords will be salted and hashed.

1.3 Professional and Ethical Issues

Kebab Tycoon will have an authentication system where username and password are required. In the registration session users will enter name, surname, country and age or use their Facebook/Google accounts. However, we guarantee that this information is kept safe and not shared with third parties. Data about user information may be used for our statistics purposes in the future.

After registration, users will use their username for authentication which will make them anonymous within this game and keep their personal information safe.

2. Requirements

2.1 Functional Requirements

- The game will provide an interactive tutorial at the very beginning of the game in which players can see different features.
- Players will be able to see their stock status and buy new materials necessary for the production of kebabs and maintenance of the restaurant.
- Players will be able to create new recipes and determine the prices of the kebabs and other products.
- Players will be able to see which kebab or product customers liked.

- Players will be able to see the restaurant's and the dish's popularity.
- Players will be able to buy different types of restaurant items and design the restaurant.
- Players will be able to locate their booths or restaurants in different regions of the map. They will be also able to open new branches in these regions.
- Players will be able to see each others' status on game including their profit, current restaurants etc.
- There will be game events where player will gain or lose money from.
- There will be a chance of experiencing random bad events (ex. flood, robbery, fire).
- Players can hire differently qualified waiters, chefs, couriers and cleaners.
- Players will be able to rent a place at first and then buy the venue for a higher price.
- Players will be able to unlock items depending on their levels which is calculated by experience points.
- Players will be able to advertise their restaurant which will increase their revenue.

2.2 Non-Functional Requirements

- The game will work on Android, iOS and desktop platforms.
- The game will provide easy and efficient usability.
- The game will completely meet the main expectation of the system.
- The game will require internet access.
- The UI part of the game will have a qualified isometric design.