משרד התעשיה המסחר והתעסוקה

מה"ט המכון הממשלתי להכשרה בטכנולוגיה ובמדע.



Major: תוכנה ס'

Final Project

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Documents

Table of Contents

Table of Contents

# Project Name

After much thought and deliberations, we’ve decided on the name: Poker Mate.

Those 2 words have a meaningful connection to the app.

Poker: Ofc if this is a poker app a relation to poker in the name is a welcome sight helping new players find an app that is related to the subject.

Mate: A Mate is a friend, as we want this app to be for our users.

# Background

## Current market state

The main problem in the current market of Poker apps is that there isn’t enough focus on home games and players that are playing a game without any middleman such as a site / casino.

There are a few advantages of having a home game, you don’t pay any fees, you play with people you know, You are playing in a setting where you dictate what will happen.

Also, as far as we’ve seen there isn’t a single app designed for settling poker debts of players.

This is a niche topic because if you go to a casino the amount of chips you put into the cash window is what you’ll get back, if you lost a chip or gained an extra one by mistake no one will notice, however in a home game everything needs to be perfectly balanced.

The amount of chips players go into the game with should be the amount of chips they exit the game with (all buyins == all buyouts)

We have used an Android Device and an iOS device to find apps that are in our market sector.

Here are a few notable apps we have found that are somewhat related to our app.



Main competition: **Chips of Fury**:

Pros:

* Simple GUI
* Good UX
* A lot of configurations

Cons:

* Missing key poker logic that is **game ruining** and unacceptable in professional environment (When there is a round of raises and the last player in the round goes all-in, if his all-in is **LESS** than the minimum raise the player after him will be able to **RE-raise** even though he should only have the option to call / fold)  
  This is a severe problem in game logic that is basically opens up another illegal betting round and can cause players that are trapping to “angle” and have an unfair advantage of blowing up the pot before seeing any cards on the board at all.
* Missing the ability to give player “time chips” when there is a timer per action.
* Missing additional game modes (Bomb pot Omaha 4/5 cards, Pineapple)
* Has game breaking bugs (When player shows his card, on the next round one of his whole cards can be exposed to all the other players while it should be hidden)
  + UPDATE: This issue has been fixed as of 11/12/2024.
* The app has moved into a subscription-based model
* **No Debt Settlement Feature**: Doesn't support calculating or tracking poker debts outside the app.



**Zynga Poker**:

Pros:

* A well-known app with an established player base
* Not buggy
* Has a lot of online options for different types of poker games

Cons:

* Sometimes the app can be very laggy
* The GUI is super saturated and very high contrast which can be an eye strain over long time
* No option for private games (CHECK IF TRUE)
* To many ads
* **No Debt Settlement Feature**: Doesn't support calculating or tracking poker debts outside the app.

## Problems in the current market

A problem with the app (What happens if someone brings cash and gives it to player X?) Must solve it and documents.

# Background

## General description

We want to give you some basic background to why we have made this app.

I (Giora) am a poker player, I started playing like many when COVID hit us, when more and more of my friends started playing with me, I’ve noticed a problem.

When a game was finished and we wanted to close it (sum up the wins and losses & send the money from the losers to the winners), I noticed a few problems.

1. The money didn’t add up Buy-ins ≠ Buy-outs.
2. Some people sent money to other winners and others thought they will get it from them.
3. The logic of how best and most efficiently send money to players was hard (make as little transfers as possible).

When I saw I’m playing consistently, and I have to deal with those problems each time I’ve decided I must find a tool to help me with that…

As we are in modern times, I came into the Appstore certain I will find an app to help me with these problems, but I did not.

I found a few different apps but none of them were as I needed.

At that stage I took an interest to programming and decided to try and make an app (Console App) to help me solve this issue and help me optimize my game.

I picked up Python and with a lot of help from AI I’ve made an app that had a lot of flaws but helped us organize the game transfers, To use it I needed to change the code it self so each time I needed to type the game data in the hard code.

Also although I made the app suggest different solutions to the problem that rose, I did not make it implement them. And then needed to change the hardcode again in order to implement the solution given.

After starting my first year in Ruppin, in the programming major I’ve decided to test my skills and transfer the app from python to C# using all of the things I’ve learned and more.

I’ve made this Console App from scratch, and improved many aspects of the Python app.

Here is the list of things I’ve done to make the app easier to use and enjoy.

1. String input from user to get data
2. Problem solving is implemented
3. TXT databases (Game History, Milestones, Profit/Loss tracker (for saved players))
4. Error catching and fixing
5. Using an efficient algorithm to settle debts (better than the one in Python)
6. More sentences for fun
7. And many more..

## System goals and objectives

There are 3 main functionalities for the application:

1. **Play** - Be able to play with friends (up to 9 people), Can work on a mutual network, one administration manages the game (controls the settings), Game can be saved to DBs after confirmation because sometimes you play for fun (friendly) if you do not want it saved if you want to track your “real game” (normal game).
2. **PokerSolverPro** - Be able to calculate an existing game of poker that you’ve played before with friends / other people to settle debts / After an active session in the “Play” functionality.
3. **Track your progress** of games you played (online & games you’ve inputted your name (after confirmation) PokerSolverPro function.

Why after confirmation? Because your name might be used for a different player.

1. **שם הפרויקט**
2. **רקע**

**2.1. תיאור ורקע כללי**

**2.2. מטרות המערכת**

1. **המצב בשוק והבעיות**
   1. **סקירת מצב קיים בשוק**
   2. **בעיות במצב הקיים**
2. **מה הפרויקט אמור לחדש או לשפר**
3. **דרישות מערכת ופונקציונאליות**
   1. **דרישות מערכת**
   2. **דרישות פונקציונאליות**
4. **בעיות צפויות במהלך הפיתוח ופתרונות** 
   1. **תיאור הבעיות**
   2. **פתרונות אפשריים**
5. **פתרון טכנולוגי נבחר**
   1. **טופולוגית הפתרון**
   2. **טכנולוגיות בשימוש**
   3. **שפות הפיתוח.**
   4. **תיאור הארכיטקטורה הנבחרת**

**7.5. חלוקה לתכניות ומודולים**

**7.6. סביבת השרת**

**7.7. ממשק המשתמש/לקוח – GUI**

**7.8. ממשקים למערכות אחרות/API**

**7.9. שימוש בחבילות תוכנה**

1. **שימוש במבני נתונים וארגון קבצים** 
   1. **מבני הנתונים**
   2. **שיטת האחסון**
   3. **מנגנוני התאוששות**
2. **תרשימי מערכת מרכזיים**

**9.1. Use Case**

**9.2. Sequence Diagram**

**9.3Data Flow**

1. **תיאור המרכיב האלגוריתמי - חישובי**

**10.1 הבעיה שבא לפתור**

**10.2 איסוף מידע וניתוחים סטטיסטיים**

1. **אבטחת מידע**
2. **משאבים הנדרשים לפרויקט**

**12.1 מספר שעות המוקדש לפרויקט, חלוקת עבודה בין חברי הצוות**

**12.2 ציוד נדרש**

**12.3 תוכנות נדרשות**

**12.4 ידע חדש שנדרש ללמוד לצורך ביצוע הפרויקט**

**12.5 ספרות ומקורות מידע**

1. **תכנית עבודה ושלבים למימוש הפרויקט**
2. **בדיקות**

**14.1 בדיקות תהליכיות**

**14.2 בדיקות יחידה**

1. **בקרת גרסאות**
2. **קטעי קוד**