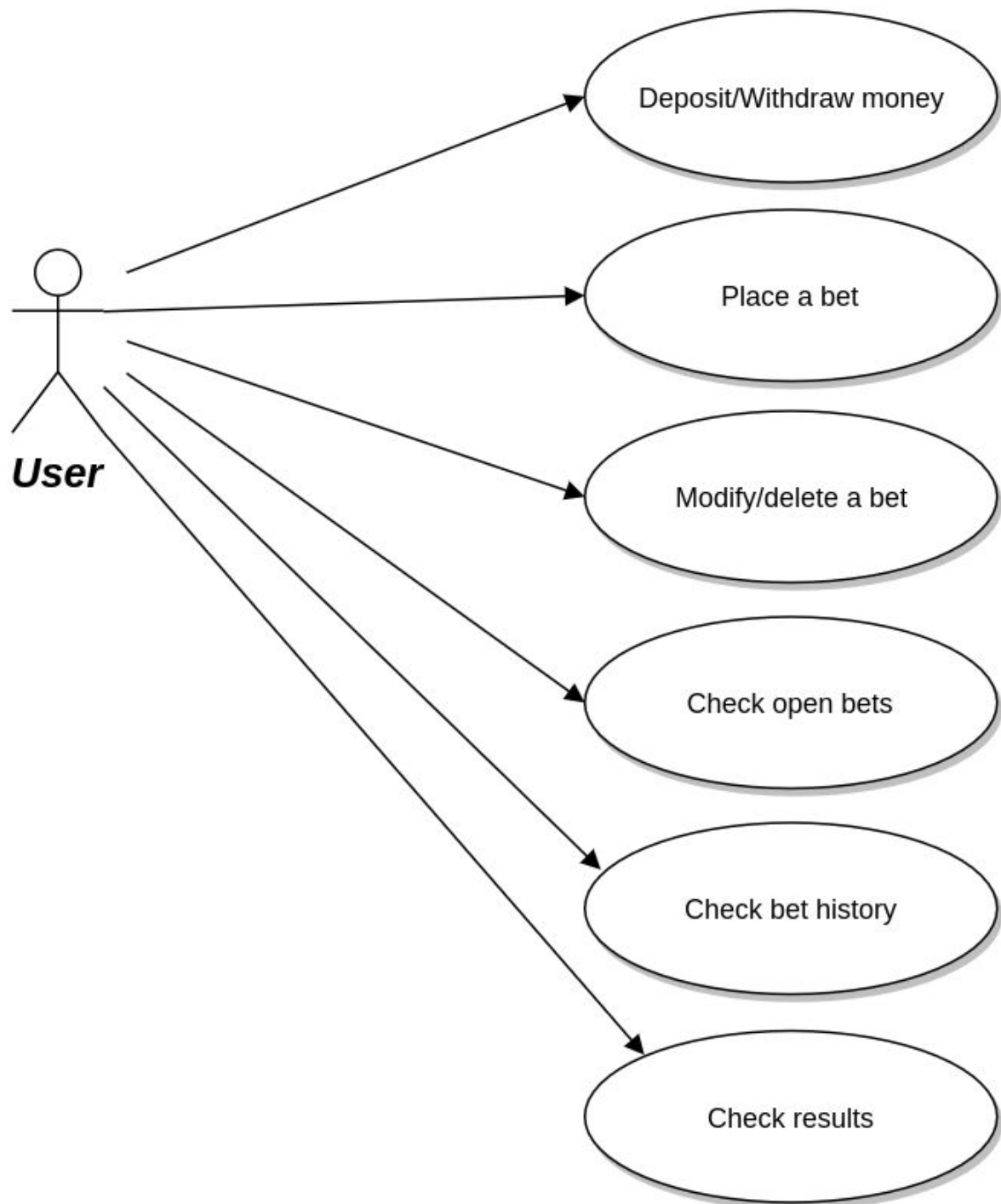# GreenBook documentation

Introduction

GreenBook makes it easier to track your bets and betting performance. You can gather all your bets from multiple betting accounts into one application. After an account has been created and the first deposit is made, its is possible to start placing bets. If the balance keeps growing, it is also possible to withdraw your winnings. Once a bet is placed, it will remain in an "open" state until it is declared as won/lost. Once a bet is won/lost it will count towards the total amount of money won/lost.

To place a bet, you need to fill in the booking site, amount and event details. You can place single bets, but it is also possible to place combo bets that consist of multiple events.

The application will be implemented on HYY users-servers using PHP and PostgreSQL.
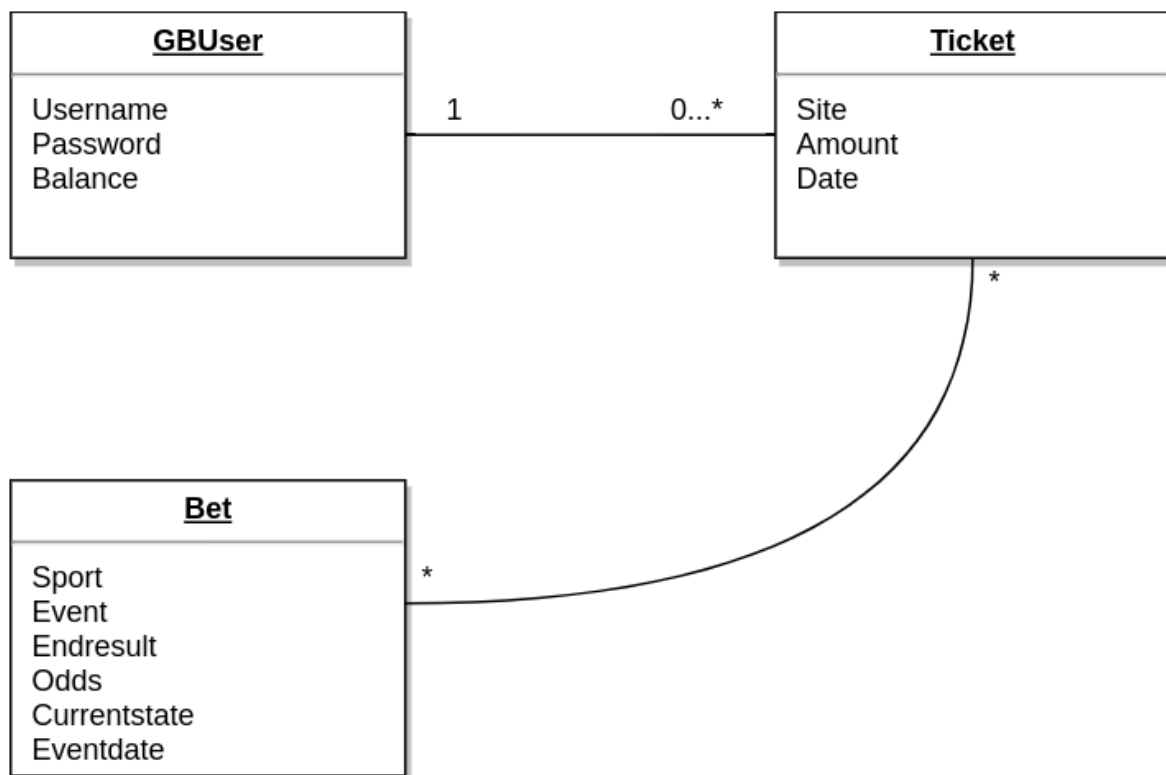
User cases

- Deposit/Withdraw money
  -User must be able to see his account balance, deposit money and withdraw money from his/her account.
- Place a bet
  -User must be able to place a betting ticket. One ticket can contain a single event or multiple events depending on users choice.

- Modify/delete a bet
  -User must be able to modify or delete his/her betting tickets or individual events on a ticket in case mistakes or events that cannot be declared won or lost.
- Check open bets
  -User must be able to see his/her open bets. User must also be able to easily close them by declaring them won/lost
- Check bethistory
  -User must be able to see all bets he/she has placed.
- Check results
  -User must be able to see the total results of all the closed bets.

Conceptual schema

GBUser
Username: Name picked by user
Password: Password picked by user
Balance: Amount of money user has on his/her account

Ticket
Site: Site/booker where the bet is made
Amount: How much money is at stake
Date: Date when the bet is placed

Bet
Sport: Bet category, for example NHL, e-sports, politics etc.
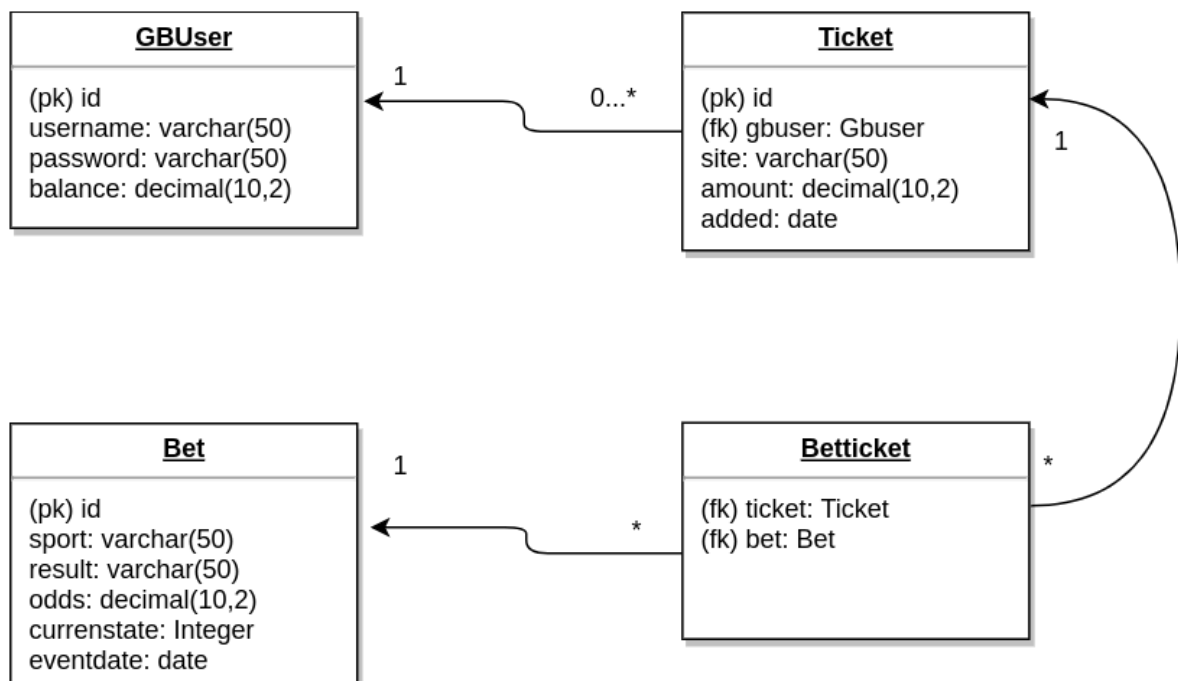**Event:** The specific event, for example Chicago vs Calgary, USA presidential election etc.
Endresult: What is the wanted outcome of the bet
Odds: Odds given by the booker
Currentstate: Possible states are won, lost, open
Eventdate: Date of the event

Relational database schema

GBUser

(pk) id
username: varchar(50)
password: varchar(50)
balance: decimal(10,2)

Ticket

(pk) id
(fk) gbuser: Gbuser
site: varchar(50)
amount: decimal(10,2)
added: date

1 ← 0...*

1

Bet

(pk) id
sport: varchar(50)
result: varchar(50)
odds: decimal(10,2)
currenstate: Integer
eventdate: date

Betticket

(fk) ticket: Ticket
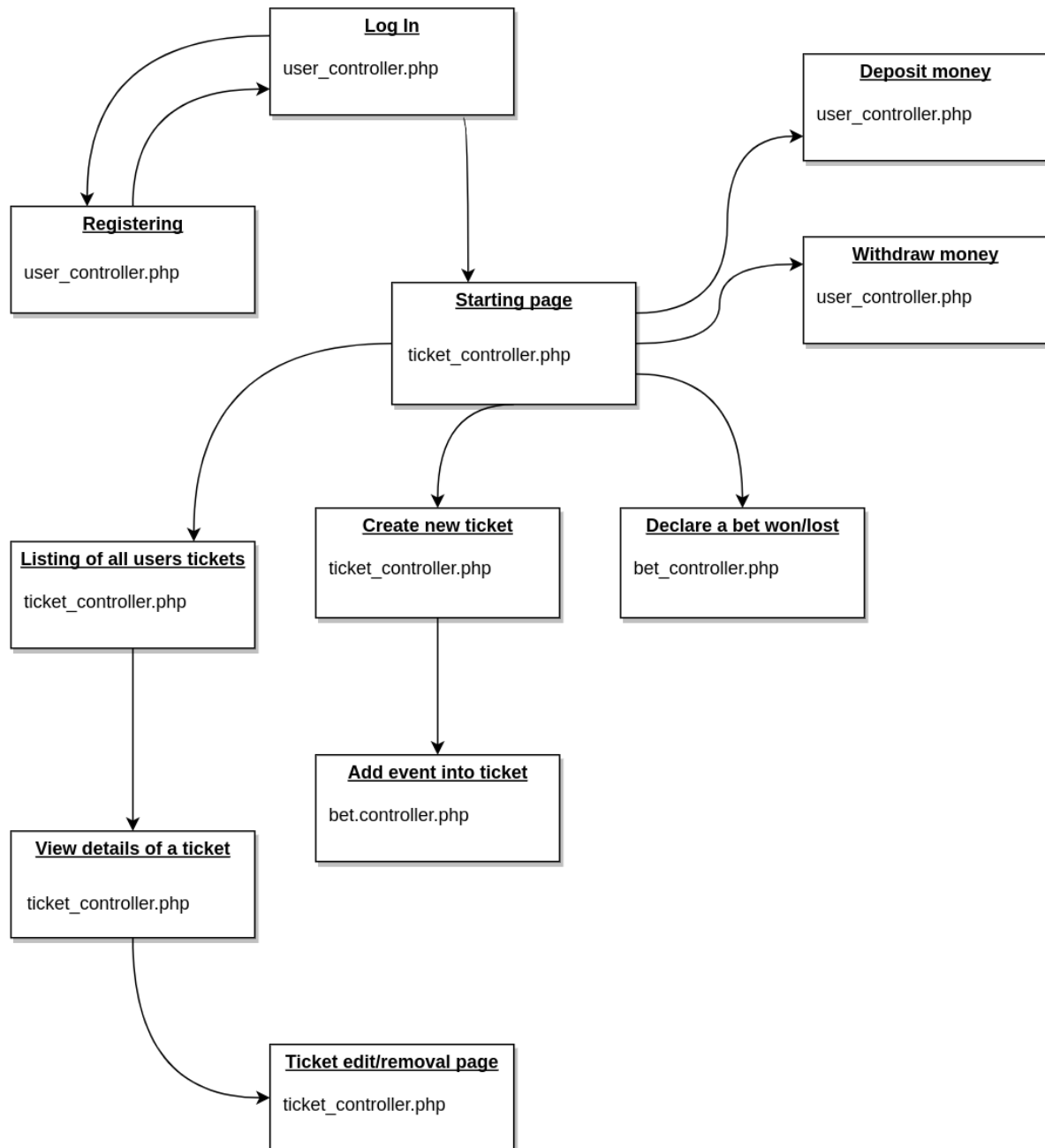(fk) bet: Bet

1 ← *

*

System Structure

The application follows the MVC-model. The models, views and controllers can be found in the model-, view- and controller-directories. There are three different models - ticket.php, bet.php and gbuser.php. Each of these have their own controllers that are resposible for communicating between the models and the views.
All the libraries that are used can be located under the lib-directory. SQL-statements are located in the sql-directory.

User interface and system components

The application has only private access content, so the log in view and registering view are the only ones open to public. A public front page could be added, but all the other views will remain private.

User Manual

GreenBook is a simple application to use. Create your account, log in, deposit some money and you are ready to start placing bets. Bets are placed by filling the forms and clicking a button. You can view all your open bets on the front page of GreenBook. In the bet history section you can see a listing of all your bets and the total amount of money you have won/lost. Good luck!

For testing purposes:
Username: devnull
Password: devnull