Section 1

Legendas

Associação

Herança

Implementação

Dependência

Composição

Classe Abstrata

Classe

Interface

Enum

PasswordHasher

```
+ hash(String password): String
+ compare(String password, String hashedPassword): boolean
```

User

Attributes
- id: UUID
- firstName: String
- lastName: String
- email: String
- passwordHash: String

```
+ User(String firstName, String lastName, String email, String password)
+ getId(): UUID
+ setId(UUID id)
+ getFirstName(): String
+ setFirstName(String firstName)
+ getLastName(): String
+ setLastName(String lastName)
+ getEmail(): String
+ setEmail(String email)
+ getPasswordHash(): String
+ setPassword(String password)
+ authenticate(String password)
+ hash(String password): String (implementa PasswordHasher)
+ compare(String password, String hashedPassword): boolean (implementa PasswordHasher)
```

Admin

Attributes
- events: Set

```
+ Admin(String firstName, String lastName, String email, String password)
+ getEvents(): Set
+ setEvents(Set<Event> events)
+ authenticate(String password): void (Sobrescreve User.authenticate)
+ createEvent(Event event): Event
+ editEvent(UUID eventId, String sport, String description, String
expectedResult): Event
+ finishEvent(UUID eventId, String result): void
+ viewAllBetsOfEvent(UUID eventId): List
```

CurrencyFormatter

Attributes
+ static format(double amount): String

Gambler

Attributes
- balance: double
- registrationDate: LocalDateTime
- bets: Set
- transactions: Set

```
+ Gambler(String firstName, String lastName, String email, String password,
double initialBalance)
+ getBalance(): double
+ setBalance(double balance)
+ getRegistrationDate(): LocalDateTime
+ setRegistrationDate(LocalDateTime registrationDate)
+ getBets(): Set
+ setBets(Set<Bet> bets)
+ getTransactions(): Set
+ setTransactions(Set<Transaction> transactions)
+ viewCurrentBalance(): double
+ authenticate(String password): void (Sobrescreve User.authenticate)
+ deposit(double amount): void
+ withdraw(double amount): void
+ bet(Event event, String expectedResult, double value, double odd): Bet
+ viewBetHistory(): List
+ viewStatement(): void
```

N — Gerencia — 1

N — Realiza — 1

N — Faz — 1

N — Possui — 1 1

EventStatus

- PENDING
- IN_PROGRESS
- COMPLETED
- CANCELLED

```
+ pending(): EventStatus
+ isPending(): boolean
+ inProgress(): EventStatus
+ isInProgress(): boolean
+ completed(): EventStatus
+ isCompleted(): boolean
+ cancelled(): EventStatus
+ isCancelled(): boolean
+ toString(): String
```

Event

Attributes
- id: UUID
- sport: String
- description: String
- expectedResult: String
- status: EventStatus
- result: String
- startedOn: LocalDateTime
- finishedOn: LocalDateTime
- bets: Set

```
+ Event(String sport, String description, String expectedResult)
+ getId(): UUID
+ setId(UUID id)
+ getSport(): String
+ setSport(String sport)
+ getDescription(): String
+ setDescription(String description)
+ getExpectedResult(): String
+ setExpectedResult(String expectedResult)
+ getStatus(): EventStatus
+ setStatus(EventStatus status)
+ getResult(): String
+ setResult(String result)
+ getStartedOn(): LocalDateTime
+ setStartedOn(LocalDateTime startedOn)
+ getFinishedOn(): LocalDateTime
+ setFinishedOn(LocalDateTime finishedOn)
+ getBets(): Set
+ setBets(Set<Bet> bets)
+ addBet(Bet bet): void
+ updateResult(String result): void
+ finish(): void
```

Transaction

Attributes
- id: UUID
- userId: UUID
- type: TransactionType
- value: double
- carriedOutIn: LocalDateTime

```
+ Transaction(UUID userId, TransactionType type, double value)
+ getId(): UUID
+ setId(UUID id)
+ getUserId(): UUID
+ setUserId(UUID userId)
+ getType(): TransactionType
+ setType(TransactionType type)
+ getValue(): Double
+ setValue(double value)
+ getCarriedOutIn(): LocalDateTime
+ setCarriedOutIn(LocalDateTime carriedOutIn)
```

TransactionType

- DEPOSIT
- WITHDRAWAL
- BET

```
+ deposit(): TransactionType
+ isDeposit(): boolean
+ withdrawal(): TransactionType
+ isWithdrawal(): boolean
+ bet(): TransactionType
+ isBet(): boolean
+ toString(): String
```

BetStatus

- PENDING
- WON
- LOST

```
+ pending(): BetStatus
+ isPending(): boolean
+ won(): BetStatus
+ isWon(): boolean
+ lost(): BetStatus
+ isLost(): boolean
+ toString(): String
```

Bet

Attributes
- id: UUID
- userId: UUID
- eventId: UUID
- expectedResult: String
- value: double
- odd: double
- possibleReturn: double
- status: BetStatus
- betAt: LocalDateTime

```
+ Bet(UUID userId, UUID eventId, String expectedResult, double
value, double odd)
+ getId(): UUID
+ setId(UUID id)
+ getUserId(): UUID
+ setUserId(UUID userId)
+ getEventId(): UUID
+ setEventId(UUID eventId)
+ getExpectedResult(): String
+ setExpectedResult(String expectedResult)
+ getValue(): double
+ setValue(double value)
+ getOdd(): double
+ setOdd(double odd)
+ getPossibleReturn(): double
+ setPossibleReturn(double possibleReturn)
+ getStatus(): BetStatus
+ setStatus(BetStatus status)
+ getBetAt(): LocalDateTime
+ setBetAt(LocalDateTime betAt)
+ calculatePossibleReturn(): double
+ verifyResult(String actualResult): void
```