### Functional Requirements:

#### Functions:

#### 1) User Management:

- \*\*Function:\*\*

- \*\*Description:\*\* Users can create accounts with personal details.

- \*\*Inputs:\*\* Name, address, email, phone number.

- \*\*Outputs:\*\* User accounts created, edited, or deleted by admin.

#### 2) Deposit and Participation:

- \*\*Function:\*\*

- \*\*Description:\*\* Users deposit 100 PKR daily for participation.

- \*\*Inputs:\*\* Daily deposit from users.

- \*\*Outputs:\*\* Contribution records maintained, automatic entry into the daily prize draw.

#### 3) Daily Winner Selection:

- \*\*Function:\*\*

- \*\*Description:\*\* Random selection of daily winner from participant pool.

- \*\*Inputs:\*\* Participant pool data.

- \*\*Outputs:\*\* Daily winner selection, awarding 80% of the daily collected amount (10,00,000 PKR).

#### 4) Prize Distribution:

- \*\*Function:\*\*

- \*\*Description:\*\* Calculation of service charge (5%) and fund allocation (15%).

- \*\*Inputs:\*\* Daily prize amount.

- \*\*Outputs:\*\* Service charge deduction, allocation to welfare fund.

#### 5) Monthly Returns:

- \*\*Function:\*\*

- \*\*Description:\*\* Providing monthly return of 1,000 PKR to winners.

- \*\*Inputs:\*\* Winner data, specified duration.

- \*\*Outputs:\*\* Monthly return provision.

#### 6) Transparency and Audit:

- \*\*Function:\*\*

- \*\*Description:\*\* Ensuring transparency in winner selection and fund management.

- \*\*Inputs:\*\* System logs, reports.

- \*\*Outputs:\*\* Accessible audit logs and reports for scrutiny.

#### 7) Fraud Detection Module:

- \*\*Function:\*\*

- \*\*Description:\*\* Training the system to detect potential fraud.

- \*\*Inputs:\*\* Publicly available datasets (e.g., Credit Card Fraud Detection).

- \*\*Outputs:\*\* Machine learning-based fraud detection within the prize draw system.

### Non-Functional Requirements:

#### Performance:

- The system should handle a participant pool of 10,000 users efficiently without delays in winner selection or deposit processing.

#### Security:

- The system should implement robust encryption techniques to secure user data, transactions, and sensitive information.

#### Usability:

- The platform should have an intuitive user interface, guiding users through account creation, deposit procedures, and participation in the prize draw.

~~#### Reliability:~~

~~- The system should have backup mechanisms and fail-safes to ensure uninterrupted operation, especially during winner selection and fund distribution.~~

#### Scalability:

- The system should be designed to accommodate potential increases in participant numbers without compromising performance.

~~#### Accuracy:~~

~~- The fraud detection module should continuously improve its accuracy in identifying potential fraud through ongoing training and user feedback.~~

#### Adaptability:

- The system should be adaptable to new fraud patterns and evolving threats, allowing for updates and modifications to the detection module.

#### Compliance:

- The platform should adhere to relevant data privacy regulations and legal requirements concerning user information and fund management.

#### Collaboration:

- The system should support collaborative efforts by enabling administrator to report, investigate, and address potential fraudulent activities effectively.