Bawlin'

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Agenda

- Business Problem
- Executive Summary
- Technical Rundown
- Tech Demo

Business Problem

→ Performance statistics are vital for serious players, but can also act as guidance for more casual players looking to improve. Both bowling players and teams (regardless of skill level) would greatly benefit from having a simple and convenient method of keeping track of their bowling stats.

Executive Summary

→ The Bawlin' application provides bowling players and teams an easy and straightforward way of keeping track of their bowling stats. Teams and players also have the ability to view and modify their stats or personal information.
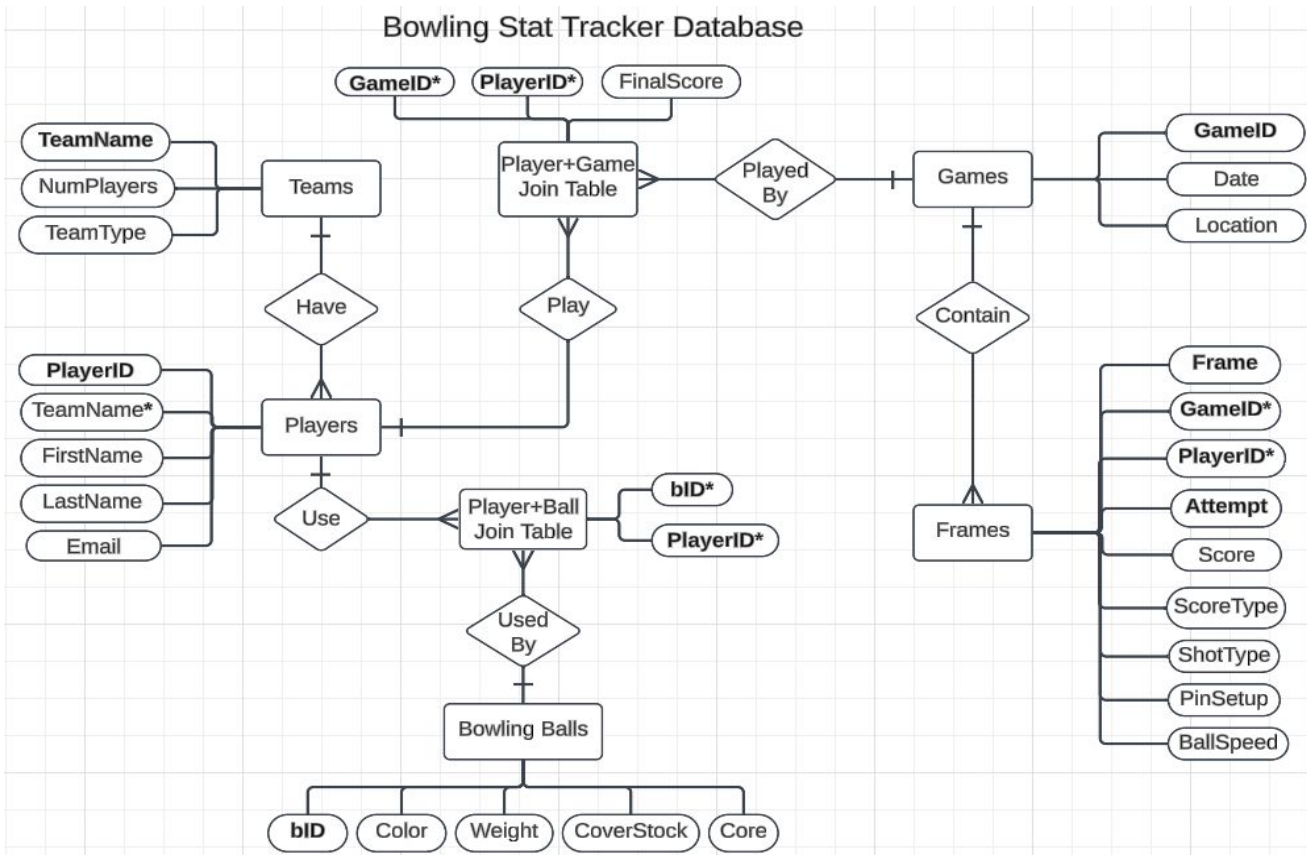
Technical Rundown

- ER Diagram/Schema + Functional Dependencies

- High-Level Overview of Code

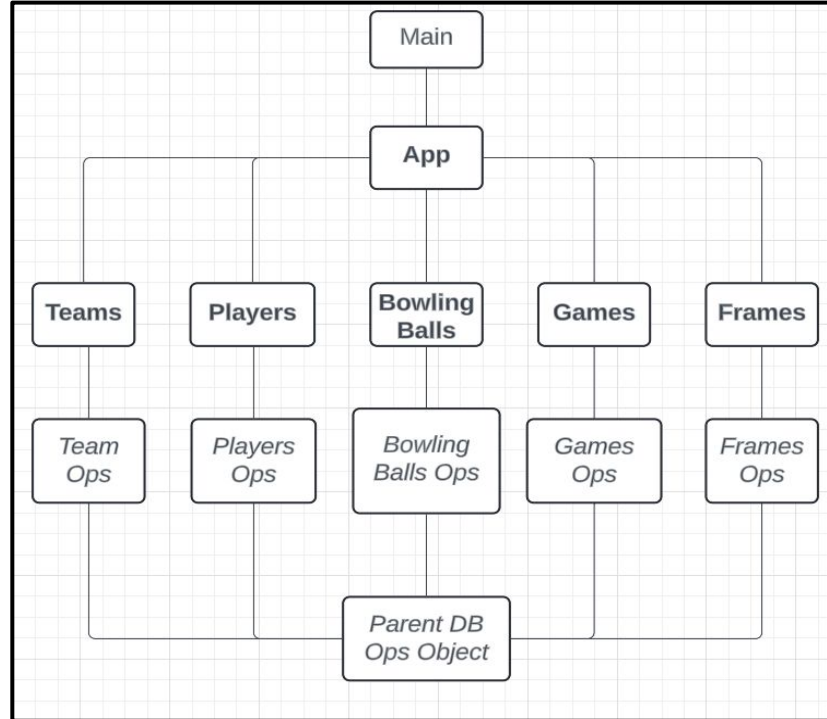- How Solution Functions + Interaction with Database

Database Schema/Diagram

Bowling Stat Tracker Database

Functional Dependencies

Functional Dependencies

- ~~**Login**: PlayerID → Username, Email~~
- **Teams:** (TeamName) → NumPlayers, TeamType
- **Players**: (PlayerID) → TeamName, FirstName, LastName, Email
- **Player+Ball JT**: N/A
- **Bowling Balls**: (bID) → Color, Weight, CoverStock, Core
- **Player+Game JT**: (PlayerID, GameID) → Final Score
- **Games**: (GameID) → Date, Location
- **Frames**: (Frame, GameID, PlayerID, Attempt) → Score, ScoreType, ShotType, PinSetup, BallSpeed
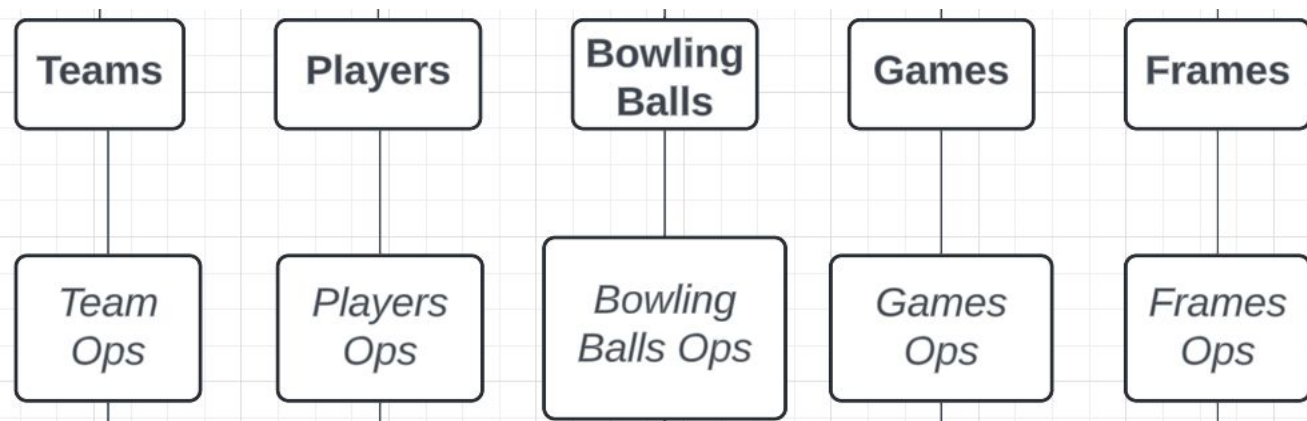
Code Overview

How App Functions

- Start at Main Menu →
  - Choose which table to interact with: **Teams, Players, Bowling Balls, Games, Frames** (Opens new GUI window)
  - GUI window provides various database interaction functionalities, such as displaying records, adding records, etc.
- Main Menu always open, can interact with multiple tables at once.

Interaction w/ Database

- Each "Ops" file calls pre-created procedures stored in the database.
- Non-Ops files display results from the procedures, take user input for input based procedures, and create the GUI.

Teams	Players	Bowling Balls	Games	Frames
Team Ops	Players Ops	Bowling Balls Ops	Games Ops	Frames Ops

Tech Demo