🏈 NFL Betting Bot Build Tracker

# Project Overview

This document outlines the complete NFL Betting Bot build including modules, timelines, future expansion, and integration logic. Use it as a checklist and master reference to track your progress and revisit unfinished work.

# ✅ Core Modules (Built or In Progress)

* 🧩 setup\_db.py: Sets up the database schema and structure
* 🧩 insert\_historical\_games.py: Inserts 4+ years of historical NFL data
* 🧩 team\_season\_summary.py: Computes team power scores per season
* 🧩 matchup\_power\_summary.py: Evaluates power deltas and upsets for every matchup
* 🧩 player\_vs\_defense\_summary.py: Analyzes how players perform vs strong/weak defenses
* 🧩 ev\_calculator.py: Calculates expected value using bot and book odds
* 🧩 map\_player\_teams.py: Maps each player to correct team across years
* 🧩 preview\_nfl\_schedule.py: Pre-loads upcoming schedule to support early predictions
* 🧩 inspect\_player\_tables.py: QA check on table health & schema
* 🧩 view\_odds.py & get\_odds\_fixed.py: Pull and standardize current moneyline/spread/total odds
* 🧩 view\_games.py: Displays current and historical games for reference
* 🧩 update\_scores.py & check\_scores.py: Validates and updates real game scores post-week

# 📅 Build Timeline (Jul–Sep)

1. Week 1: Core setup: all base files, database, historical ingest
2. Week 2: Injury + News Tracker
3. Week 3: Player Prop Engine
4. Week 4: EV Engine + Multi-book Odds Comparison
5. Week 5: Prediction Model (first pass)
6. Week 6: Test Mode (simulate past bets)
7. Week 7: Streamlit UI
8. Week 8: Promos/Specials Tracker
9. Week 9: Final QA + Hosting + Go Live

# 🧠 Advanced Features / Bot Intelligence

* 🧠 Bot evaluates matchups using matchup\_power\_summary (favored team, upset risk, confidence margin)
* 🧠 Bot uses player\_vs\_defense\_summary to detect elite matchups (e.g. WR vs worst secondary)
* 🧠 Bot uses ev\_calculator to evaluate bet value
* 🧠 Bot compares across sportsbooks for value betting
* 🧠 Bot automatically recommends picks based on model score + edge + matchup
* 🧠 Injury/news alters bot confidence (Injury Impact Score)
* 🧠 Prediction Model aligns player props, outcomes, TDs with machine learning

# 📌 Remaining Modules To Build

* 🔲 NCAAF Odds Fetcher
* 🔲 Injury & News Tracker
* 🔲 Player Prop Engine
* 🔲 EV Engine across multiple books
* 🔲 Prediction Model (team/player level)
* 🔲 Test Mode simulation
* 🔲 Streamlit/Web UI
* 🔲 Promos Tracker (e.g. free bets, bonus odds)
* 🔲 Bankroll Tracker (manual + dynamic modes)
* 🔲 Auto-betting logic or webhook firing
* 🔲 Final QA before go-live
* 🔲 DB hosting on Supabase or Postgres cloud