Lawn Bowls Scoring Software – Data-Driven System Design

Objective

To develop a user-friendly and analytics-driven lawn bowls scoring software that captures match data seamlessly while ensuring smooth usability in outdoor conditions (sunlight/floodlights). The system will balance on-field quick inputs with backend analytics to enable strategic insights, game analysis, and storytelling.

System Overview

What the Software Will Do

1. 1. Frontend (For Players/Scorers on Field)

- - Enable quick and simple data entry per End (score, jack position, playstyle, etc.).
- - Support high-contrast UI for outdoor/floodlight visibility.
- - Avoid complex text inputs; use checkboxes, dropdowns, and toggles.

2. 2. Backend (For Data Analytics & Insights)

- - Process Win Probability, Pressure Index, Performance Trends.
- - Store match history for player analytics & storytelling.
- - Auto-calculate strategic game metrics.

How to Do It (UI/UX Design & Flow)

1. Frontend UI Elements (Scorer Input)

• End Number → Auto-incremented (Editable if needed)

• Team A & Team B Score → Number Picker (0-9)

• Confirm Score? → Checkbox (Prevents accidental entries)

• Jack Placement → Dropdown (Short / Medium / Long)

• Winning Shot Type → Dropdown (Draw / Drive / Weighted / Other)

• Last Bowl Impact? → Toggle (Yes/No)

• Touchers Count → Number Picker (0-4)

• End Type (Tactical Summary) → Dropdown (Defensive / Aggressive / Balanced / Comeback)

• Notable Play? → Checkbox (Game-Changing Moment)

• Manual Notes → Short Text (15-word limit, optional)

2. Backend Processing & Data Analytics

- Leader After Each End → Auto-calculated
- Margin of Lead → Auto-calculated
- Win Probability Per End → Computed Algorithmically
- Pressure Index Per End → Based on score gap & bowl count
- Shot Accuracy & Performance Trends → AI-driven analysis

Developer Task List

See the attached Excel file for a detailed breakdown of tasks.