

Lineup Builder - Coach Manual

Quick Start Guide

Getting Started

- 1. **Open the application** in your web browser at <https://cactusbass.github.io/lineup-builder/>
 - 2. **Enter your Team Code** - you'll be prompted to enter your unique team code to access your team's data
 - 3. **Start with the Dashboard** - your home base for managing your team
 - 4. **Add your players** using the Players section
 - 5. **Schedule a game** and generate lineups automatically
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Key Features

Team Code System

- **Required authentication** - you must enter your team code to access the application
- **Unique team access** - each coach gets a personalized team code for their team
- **Secure data isolation** - your team data is completely separate from other teams
- **Data persistence** - your players, games, and lineups are saved per team code
- **Easy switching** - you can enter different team codes to manage multiple teams
- **Logout button** - located in the top-right corner to easily logout and switch teams

Dashboard

- **Overview** of your team stats (total players, pitchers, catchers)
- **Quick access** to recent games and lineup generation
- **Team management** shortcuts

Players Management

- **Add players** with names and special roles (pitcher/catcher)
- **Set position restrictions** - exclude players from specific positions
- **Edit or remove** players as needed
- **Visual badges** show pitcher/catcher status and excluded positions

Games & Lineups

- **Schedule games** with opponent, date, and number of innings
- **Select available players** for each game
- **Generate defensive lineups** with advanced rotation algorithms
- **Create batting orders** with drag-and-drop functionality
- **View comprehensive lineup statistics** and playing time balance
- **Print lineup cards** for easy reference during games

Smart Lineup Generation

The system automatically:

- **Rotates pitchers** (max 2 innings per pitcher, prefers 6 different pitchers)
- **Manages catchers** (max 2 innings, no consecutive innings)
- **Balances playing time** (equal infield/outfield time distribution)
- **Respects position exclusions** and player availability
- **Manages bench time** fairly when you have 10+ players
- **Uses advanced algorithms** with multi-factor scoring for fair selection

Rules & Constraints Tab

- **Transparent algorithm** - View all the rules and logic used to generate lineups

- **Core principles** - Understand how positions are filled and players are selected
 - **Pitching rules** - See how pitcher rotation and limits are managed
 - **Catching rules** - Learn about catcher rotation and rest requirements
 - **Playing time balance** - Understand how fair playing time is calculated
 - **Bench management** - See how bench time is distributed fairly
 - **Algorithm transparency** - Full visibility into the decision-making process
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Step-by-Step Workflow

1. Access Your Team

- 1. **Open the application** at <https://cactusbass.github.io/lineup-builder/>
- 2. **Enter your Team Code** when prompted
- 3. **Access your team's dashboard** and data

2. Set Up Your Team

- 1. Go to **Players** page
- 2. Click **"Add Player"**
- 3. Enter player name
- 4. Check **"Pitcher"** if they can pitch
- 5. Check **"Catcher"** if they can catch
- 6. Select any **excluded positions** (positions they cannot play)
- 7. Click **"Add Player"**

3. Schedule a Game

- 1. Go to **Games** page
- 2. Click **"Schedule Game"**
- 3. Enter opponent name and date
- 4. Select number of innings (5, 6, or 7)
- 5. Choose which players are available

- 6. Click "**Schedule Game**"

4. Generate Lineup

- 1. From the Games page, click on your game to open **Game Details**
- 2. Click "**Generate Defensive Lineup**" to create position rotations
- 3. Use "**Auto-Generate Order**" or drag-and-drop to create batting order
- 4. Review the **comprehensive statistics** and playing time balance
- 5. **Print lineup cards** for easy reference during the game

5. Verify Lineup Balance

- 1. **Check the statistics table** - Shows innings played by each player at each position
 - 2. **Review playing time distribution** - Ensure fair infield/outfield time balance
 - 3. **Verify pitcher rotation** - Confirm no one pitches more than 2 innings
 - 4. **Check catcher rotation** - Ensure no consecutive catching innings
 - 5. **Examine bench time** - Verify fair distribution when you have 10+ players
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Tips for Best Results

Player Setup

- **Mark all pitchers** - this ensures proper rotation
- **Mark all catchers** - prevents players from being forced to catch
- **Use excluded positions** for players with physical limitations
- **Add all team members** for fair playing time distribution

Game Management

- **Check player availability** before each game
- **Adjust innings** based on league rules (5-7 innings)
- **Review generated lineups** before printing or sharing

Lineup Review

- **Check statistics table** to ensure fair playing time
 - **Verify pitcher rotation** - no one should pitch too many innings
 - **Confirm position restrictions** are respected
 - **Review Rules & Constraints tab** to understand the algorithm logic
 - **Use the statistics analyzer** to verify balance and fairness
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Sample Team Setup

The app starts with an empty roster, so you'll need to add your players. The system is designed to work with:

- **9 players minimum** (perfect setup - everyone plays all innings)
 - **10+ players** (includes bench rotation for fair playing time)
 - **Designated pitchers and catchers** (marked with P and C badges)
 - **Position exclusions** for players with limitations
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Getting Help

Common Issues

- **Can't access the app?** Make sure you have the correct team code
- **Want to logout or switch teams?** Use the "Logout" button in the top-right corner
- **No lineup generated?** Make sure you have enough players (minimum 9)
- **Player not appearing?** Check if they're marked as available for the game
- **Position conflicts?** Review excluded positions in player settings
- **Lost your team code?** Contact the application administrator for assistance

Feedback

This is a beta version! Please share your feedback on:

- **Ease of use** - Is the interface intuitive?
 - **Feature requests** - What would make this more useful?
 - **Bug reports** - Any issues you encounter
 - **Suggestions** - Ideas for improvement
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Technical Notes

- **Browser compatibility:** Works best in Chrome, Firefox, or Safari
 - **Data storage:** Currently stores data in browser (refreshing page resets data)
 - **Mobile friendly:** Responsive design works on tablets and phones
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Happy coaching!