

# EA Sports College Football – Feature Proposal (Forge Software Engineering Program – Task One)

Author: Ismail Muhammad

## Feature Proposal: Crowd Momentum System

### Overview

The Crowd Momentum System models stadium energy where fan reactions influence on-field performance. Loud cheering, chants, and crowd intensity can trigger temporary boosts or disruptions, making home-field advantage truly impactful and reflecting the emotional core of college football.

### Objectives & Value

- Authenticity: Captures the passion of college crowds and the '12th man' effect.
- Strategy: Momentum swings reward clutch plays and disciplined coaching.
- Engagement: Adds narrative weight to comebacks, turnovers, and rivalry moments.

### Key Mechanics

- Team Momentum Meter fills on impactful events (TDs, sacks, interceptions, 4th-down stops).
- Home-Field Advantage scales meter gain and audio intensity for the home team.
- Gameplay effects: High momentum grants focus/confidence buffs (quicker reads, cleaner routes); hostile noise can cause visiting miscommunications (missed audibles, occasional false starts).
- Interactive presentation: Adaptive crowd audio, dynamic camera shake at peaks, and on-screen overlays communicate state without clutter.

### Example Gameplay Scenario

Down four late in Q4, the home defense snags an interception. The crowd erupts, the meter spikes, and the defense receives a short-term awareness boost while the visiting offense struggles with snap timing amid deafening noise. The swing flips the game's outcome.

### Technical Considerations

- Implementation: Event listeners publish momentum updates; audio mixer layers chants/volume by meter thresholds; temporary attribute modifiers apply via existing gameplay systems; accessibility option to limit camera shake/noise.
- Testing: Ensure momentum benefits do not snowball excessively; simulate CPU vs CPU games with varied teams/stadium sizes; telemetry to calibrate thresholds post-launch.