

Tech Stack

- #1 comfortability - NextJS (React)
 - Jotai (State Management) - later in project (optimization focus)
 - <https://www.youtube.com/watch?v=O6P86uwfdR0>
- #2 comfortability - Firebase (DB)
 - Similar to MongoDB
 - “Collection table [folder] of players”
 - “Each document [row] inside of a collection is a player”
- GCP (Cloud)
- TypeScript
 - Great for web-programming w/ a lot of connections & finding string errors especially
- Tailwind (Styling)
 - Class names - “to make html a flex box, just make class name flex and it has CSS built into it”

Notes

Full Court Analytics Website: <https://www.fullcourtanalytics.com/#>

Emmaline:

- Does the client want us/allows us to use AI while building the project? (ChatGPT, GitHub Copilot, Kiro, etc)
- Are we adding to an existing project, or building from scratch?
- Are we working on the database/backend only?
- Will we be building it for recruits or recruiters or both?

Priscilla:

- (FROM VIDEO, what is Full Court Analytics?)
 - Joshua Kelly, founder & CEO of Full Court Analytics (spent last 2 years on D1 staff as Director of Analytics)
 - Some features mentioned:
 - w/ action type states - Break down every possession scoring action (dribble handoffs, pick & roll ballhandler, pick & roll vs pick & pop, etc.) helping to see how efficient team is
 - Lineup Analytics : see team's stats w/ any 5-man combo w/ filters available
 - Custom Shot Charts : filter by team, player, game, quarter, action-type, shot-type
 - Track paint & post touches for every possession : see full stats on team for possessions compared to not getting these touches

- Hovering over any stat on site, see what percentile your team/player ranks in that stat
 - Stats highlighted in green rank in top 25 percentile, red rank in bottom 20 percentile (analyzed over 30k games to get most accurate percentiles)
- Design for recruiting and relationship management
- Adding a searchable, filterable database of college staff to current platform
 - Players search for school, view coaches & staff, & view school's profile w/ contact info
 - User can favorite schools, log communication, track school's level of interest
- Filter by division, location, conference, etc.

Questions:

- Best form of communication? Email?
- One-click outreach templates' – will the user first select a school from a dropdown then the template will auto-fill coach & school info, or will they be in a schools profile and click email which will auto-fill the template? Will emails be sent via website to track 'activity timeline for all outreach attempts' that way, or will the template allow a copy option for users?
- 'Quick-add tasks' – can you elaborate more on the reminders that can display anywhere in the platform, like the provided ex. calling a coach?
- 'Custom tags' – where on the platform can the user add these custom labels? When they favorite a school, or will it be a separate "entity" to allow for multi-select schools to apply tags?
- 'Export to CSV' – allow users to export all schools currently favorited and all corresponding info?
- 'Response rate tracking by segment' – can you elaborate more on this?
- Possible constraints with this project?
-

Owen:

- Will we have access to an account to view the product in production?
- What is your timeline? Agile?

Questions for Clarification:

- Example Questions:
 - Type of business
 - Goals of business
 - Do they have a website?
- Explain the project process

- They know a bit because the instructor explained the process.
- Check our requirement slides and videos before meeting to refresh your knowledge about what to expect.
- Designate a team member to be recording the meeting minutes
 - Participants of the meeting
 - Everything discussed in that meeting
- You should listen to and clarify what a client is describing.
 - Paraphrase what you have heard to explicitly make it more clear.
 - You can even record the meeting if you think that will be useful and the client agrees.
- If the requirements are getting longer and longer, make sure to prioritize them with the client.
- You should ask about any kind of constraints:
 - For example, they may have some contracts with AWS, therefore, they may prefer to use it in your project too.
- The points that can be talked about in a meeting:
 - Operating environment
 - Mobile, web page, tablet, native?
 - Communication with external services or hardware
 - How was this problem solved before?
 - Is there an existing system?
 - Is there a paper-based system?
- For the project to succeed, clients must be extensively involved and made aware of how the system will work and how they will use it.
 - These should be explicitly mentioned in the monthly progress meetings.

Priority List:

- **Introduction statements:**
 - Can we record the meeting?
 - Can we use Zoom's AI to transcribe the minutes?
 - Their understanding of the project process based on what has been discussed with Ergin so far.
 - (Do you have any workflow designs?)
- **Questions:**
 - His high-level summary of the project
 - Top goals of the project
 - Are we adding to the current website, or starting new?
 - Has this been attempted before, or is this a new idea?

- What environment: mobile, desktop, tablet, etc?
- Are we working on the frontend and backend both?
- Is there data that is already being hosted in Google Cloud or stored in Firebase?
- **Functionality Specific Questions:**
 - ‘One-click outreach templates’ – will the user first select a school from a dropdown then the template will auto-fill coach & school info, or will they be in a schools profile and click email which will auto-fill the template? Will emails be sent via website to track ‘activity timeline for all outreach attempts’ that way, or will the template allow a copy option for users?
 - ‘Quick-add tasks’ – can you elaborate more on the reminders that can display anywhere in the platform, like the provided ex. calling a coach?
 - ‘Custom tags’ – where on the platform can the user add these custom labels? When they favorite a school, or will it be a separate “entity” to allow for multi-select schools to apply tags?
 - ‘Export to CSV’ – allow users to export all schools currently favorited and all corresponding info?
 - ‘Response rate tracking by segment’ – can you elaborate more on this?
 - ‘User can have easy note-taking’ – what form would you like this to look like?
 - ‘Target Users: Players, Parents/Guardians, Recruiting Advisors/Trainers’ – Will the dashboard have different features/look different for different users?
 - How will we obtain all the data for schools stored in the database? Will specific schools not be in the database? Is this data already stored?
- **Personal Preference Questions:**
 - Best form of communication? Email?
 - What is his timeline; does he want the project to be complete in iterations so that it is still functioning all throughout the timeline at each iteration? (Agile)
 - Does the client want us/allows us to use AI while building the project? (ChatGPT, GitHub Copilot, Kiro, Cursor is good)

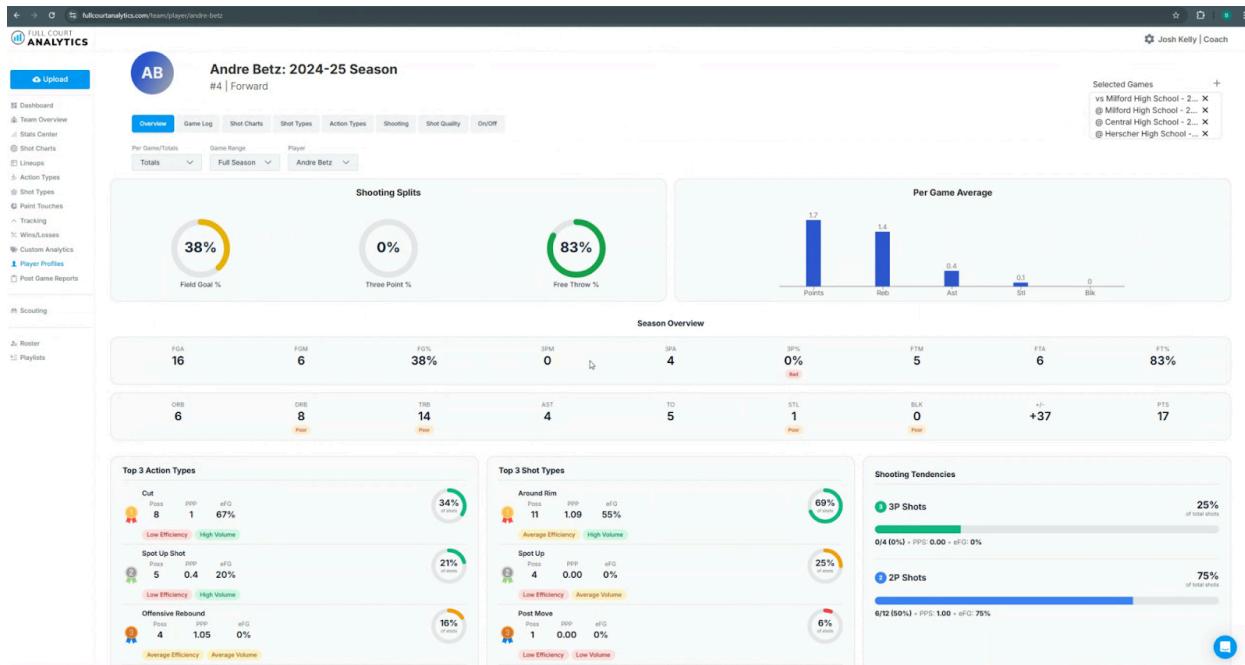
Notes:

- He has some concerns with the techstack
 - We have to use Firebase and React/Next.js because his other site already uses those
 - He does not like firebase tho
- High level project description:
 - Similar to Hudl
 - Basic analytics for basketball
 - Helping high school basketball players get recruited.
 - He wants students to be able to send a recruiter a full court analysis of their own personal stats.

- They track every single statistic that's possible except passes/ball touches
- Once the film is uploaded, they don't store individual stats, they store what happened in the game as a whole
 - Videos stored in s3 bucket in aws
 - Player specific in our case
 - The database only has a list of games and a list of possessions in those games. It doesn't know which player scored against which other player
 - (This will likely cause some interesting database queries to find specific info on player)
 - Very high filterability
 - ("During this game and these action type, the team struggled a bit")
 - Customers don't have access to the backend
- He will send us a few important screenshots to reference
 - Possession data x3
 - Emmaline is also recording on her phone
- There is a lot of reused logic throughout the site
- We're building a whole new website separated from the existing project
- Clickable stats is a feature that they implement
 - Clicking it will take you to a list of the possessions where those stats occurred
 - He also wants clickable court areas

The screenshot shows a web application interface for basketball analytics. At the top, there's a navigation bar with links like 'Dashboard', 'Team Overview', 'Stats Center', 'Shot Charts', 'Action Types', 'Shot Types', 'Tracking', 'Wins/Losses', 'Custom Analytics', 'Player Profiles', 'Post Game Reports', 'Scouting', 'Roster', and 'Playlists'. On the right side, there's a sidebar for 'Selected Games' with checkboxes for 'vs Milford High School - 2...', '@ Milford High School - 2...', '@ Central High School - 2...', and '@ Herscher High School - 2...'. Below the sidebar, there's a 'Coach' link.

The main content area features two large tables of statistical data. The top table is titled 'Team Efficiency' and includes columns for Player, G, GS, % of Poss, Net Rtg, Ortg, Drtg, eFG%, TS%, 3PAr, FTr, ORB%, DRB%, TRB%, AST%, TO%, AST/TO, USG%, STL%, BLK%, STL/PF, BLK/PF, and SB/PF. The bottom table is titled 'Team Efficiency' and includes columns for Team, Net Rtg, Ortg, Drtg, eFG%, TS%, 3PAr, FTr, ORB%, DRB%, TRB%, AST%, TO%, AST/TO, STL%, BLK%, STL/PF, BLK/PF, and SB/PF. Both tables contain data for various players and teams, with colors used to highlight different performance metrics.

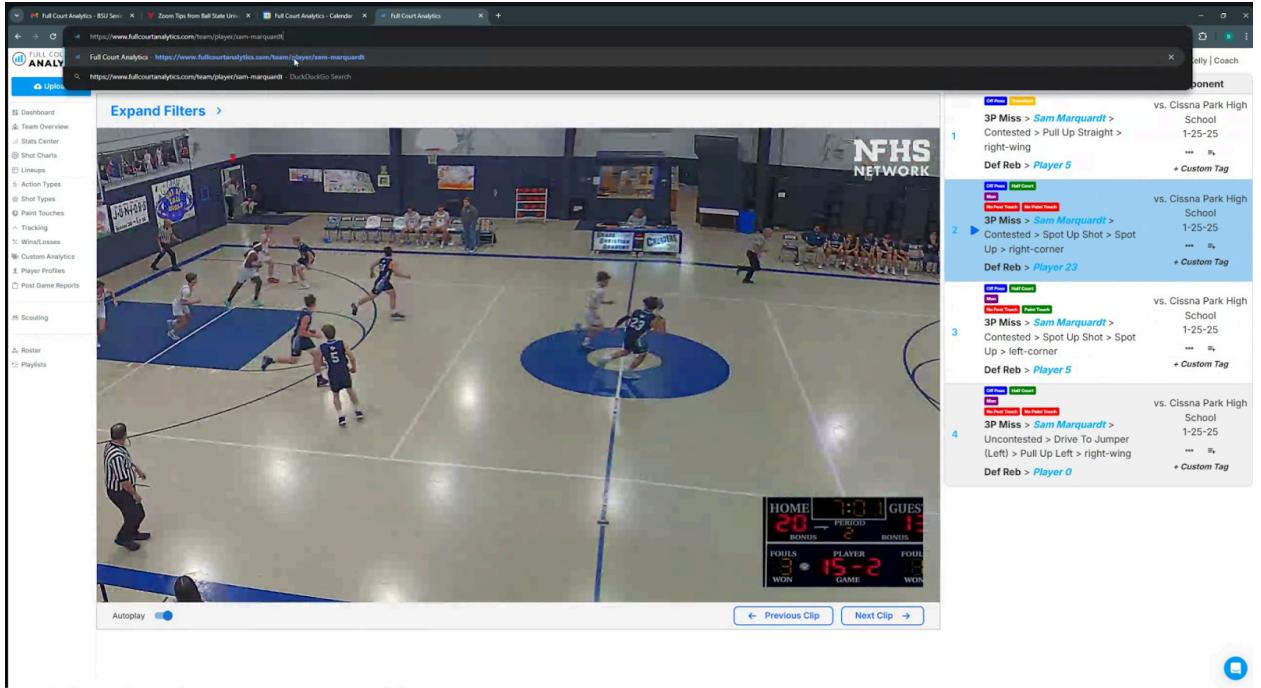


- Link to game to see game stats:

The screenshot shows the Full Court Analytics dashboard for player Sam Marquardt. Key sections include:

- Game Log:** Shows games from Fri 12/20 to Sun 2/23, detailing opponents, results, and various performance metrics.
- Detailed Statistics:** A large table showing game logs with columns for Date, Opponent, Result, % of Poss., FGM, FGA, FG%, 3PM, 3PA, 3P%, FTM, FTA, FT%, REB, AST, STL, BLK, TO, PF, and Points.

- Each stat that is clickable shows each action w/ video clips



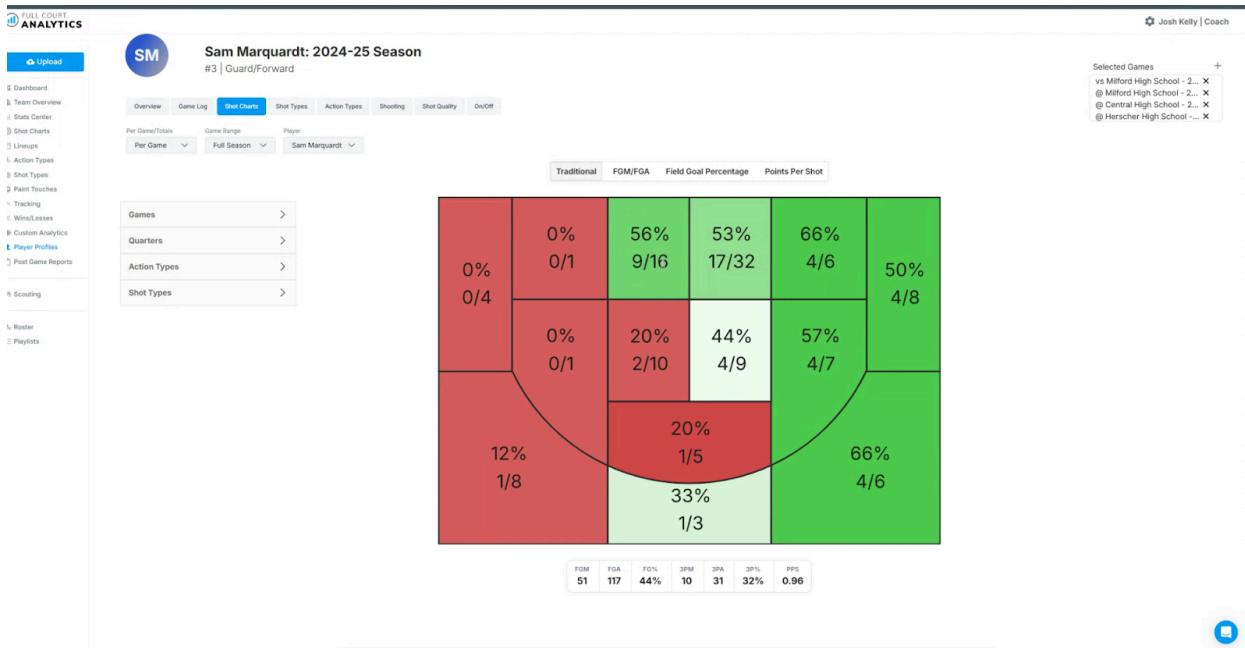
- Bryce will give us data which data is clickable

Screenshot of Full Court Analytics showing a detailed game log for player Sam Marquardt. The table lists games from Fri 12/20 to Sun 2/23, including opponent, result, and various performance metrics. A callout highlights the 'Ranks in the 33rd Percentile' for 3PM shooting.

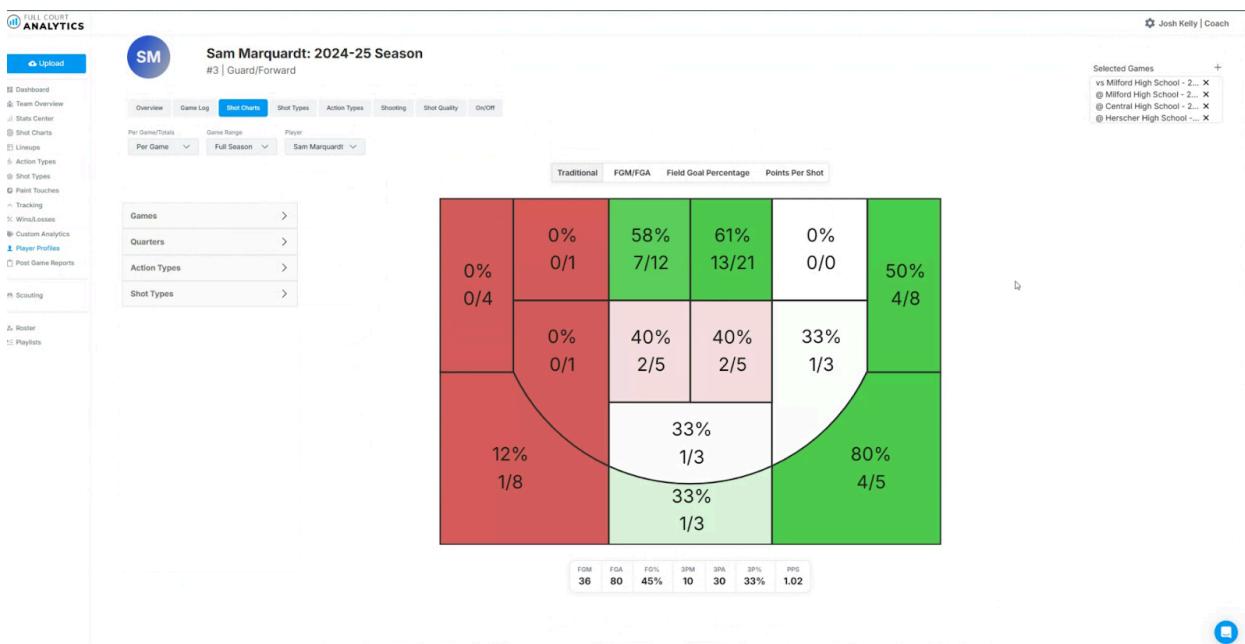
Date	Opponent	Result	% of Poss.	FGM	FGA	FO%	3PM	3PA	3P%	FTM	FTA	FT%	REB	AST	STL	BLK	TO	PF	Points
Fri 12/20	vs Villa Grove High School	W 65 - 49	100%	7	13	54%	2	3	67%	1	2	50%	8	3	2	1	6	1	17
Thu 1/9	@ Beecher High School	L 44 - 64	100%	5	14	36%	0	2	0%	3	4	75%	10	3	2	0	4	2	13
Mon 1/13	@ Central High School	L 43 - 58	90%	3	13	23%	0	2	0%	1	2	50%	6	4	2	0	0	4	7
Thu 1/16	vs Illinois Lutheran High School	W 61 - 31	98%	10	20	50%	0	1	0%	1	3	33%	10	7	1	1	1	3	13
Thu 1/23	vs Momenice High School	W 58 - 53	100%	3	5	60%	3	5	60%	3	5	60%	7	6	2	2	1	0	20
Fri 1/24	vs Cissna Park High School	W 62 - 47	93%	1	7	14%	0	4	0%	0	0	--	8	12	4	0	6	3	2
Fri 1/31	@ Herscher High School	L 50 - 67	100%	3	9	33%	1	2	50%	5	5	100%	6	5	2	0	0	10	4
Thu 2/13	@ Central High School	W 52 - 41	100%	5	12	42%	2	5	40%	1	2	50%	10	3	0	1	3	2	13
Wed 2/19	@ Milford High School	L 45 - 63	100%	4	10	40%	1	4	25%	4	6	67%	5	3	3	1	2	1	13
Sun 2/23	vs Milford High School	W 76 - 46	100%	10	16	63%	1	3	33%	2	2	100%	4	6	4	0	1	1	23



- Percentiles for game stats based on HS game data
- Stats highlighted in green rank in top 25 percentile, red rank in bottom 20 percentile (analyzed over 30k games to get most accurate percentiles)
 - Data comes in a JSON and Bryce will provide this



- Bryce will send more data on this SVG
- These areas will be clickable too to see specific stats
- First iteration will be simple stats and not a lot of clickable
- Quality vs quantity is important



- How does the backend work for XJS?
- Eventually, Bryce will make an API where we can pull data from

- We will start off by creating a Firedatabase (like a collection of tools google makes) [Firestore]

Main focuses for now:

- Exercise: building a Firebase database (free) if payment needed let Bryce know
 - <https://www.youtube.com/@Fireship>
 - The only features going to utilize:
 - Firestore db
 - Auth within Firebase

Also good to learn from (but not necessary) for next JS

- <https://www.youtube.com/@WebDevSimplified>
- research
- Needing specific figma, firebase design
 - Related to player profile page design (none at the current moment)
 - Handling stats first, then add filters & search to stats tables, school profiles
 - They have DB of coaches, schools, etc. they will provide
 - At the end of project, player should send their full court analytics link with all their stats
 - Not sure of total public availability for coach, recruit, scout yet
 - User will be basketball player themselves
- They will provide design workflow to follow

Implementing full court analytics current database towards the end iterations

- Bryce will probably make a server where we can use as a proxy DB (basic functionality “get possession for game ID for player ID”)

Josh Kelly is the founder/boss/final say guy but he's on vacation.