

CRICSCORER

Problem Definition:

Traditional cricket scoring methods present several significant challenges:

1. Manual scorekeeping is error-prone and time-consuming, requiring constant attention to complex calculations
2. Paper-based scoring systems lack real-time sharing capabilities and data backup
3. Existing digital solutions often lack user-friendly interfaces and comprehensive cricket-specific features
4. Score synchronization across different devices and locations is difficult

These challenges affect various stakeholders including:

- Match officials and scorekeepers
- Team management and players
- Cricket clubs and academies
- Tournament organizers
- Spectators and followers

Create an app which tackles these issues and solve the above problems.

Softwares used:

- I) For Backend: Express JS
- II) For Database: Postgres
- III) For Frontend: React Native

Packages Used

For backend:

bcrypt: ^5.1.1

body-parser: ^1.20.2

cookie-parser: ^1.4.6

dotenv: ^16.4.5

express: ^4.19.2

jsonwebtoken: ^9.0.2

uuid: ^10.0.0

validator: ^13.12.0

For frontend:

Main Dependencies

Authentication & Security

@clerk/clerk-expo: ^1.2.7 (Authentication)

@clerk/clerk-react: ^5.2.8

expo-secure-store: ^13.0.2 (Secure storage)

UI & Icons

@expo/vector-icons: ^14.0.2

react-native-vector-icons: ^10.1.0

Navigation & Routing

@react-navigation/native: ^6.1.18

@react-navigation/stack: ^6.4.1

expo-router: ~3.5.18

expo-linking: ~6.3.1

Core Framework & Platform

expo: ~51.0.20

react: 18.2.0

react-dom: 18.2.0

react-native: 0.74.3

react-native-web: ~0.19.10

Storage & Data Management

@react-native-async-storage/async-storage: ^1.24.0

UI Components & Utilities

@react-native-community/datetimepicker: ^8.2.0

@react-native-picker/picker: ^2.7.7

expo-image-picker: ^15.0.7

react-native-gesture-handler: ~2.16.1

react-native-reanimated: ~3.10.1

react-native-safe-area-context: 4.10.1

react-native-screens: 3.31.1

Expo Utilities

expo-constants: ~16.0.2

expo-font: ~12.0.8

expo-splash-screen: ~0.27.5

expo-status-bar: ~1.12.1

expo-system-ui: ~3.0.7

expo-web-browser: ~0.3.3

Development Dependencies

Testing

jest: ^29.2.1

jest-expo: ~51.0.3

@types/jest: ^29.5.12

react-test-renderer: 18.2.0

@types/react-test-renderer: ^18.0.7

TypeScript & Type Definitions

typescript: ~5.3.3

@types/react: ~18.2.45

@types/react-native-vector-icons: ^6.4.18

Build Tools

@babel/core: ^7.20.0

Theory:

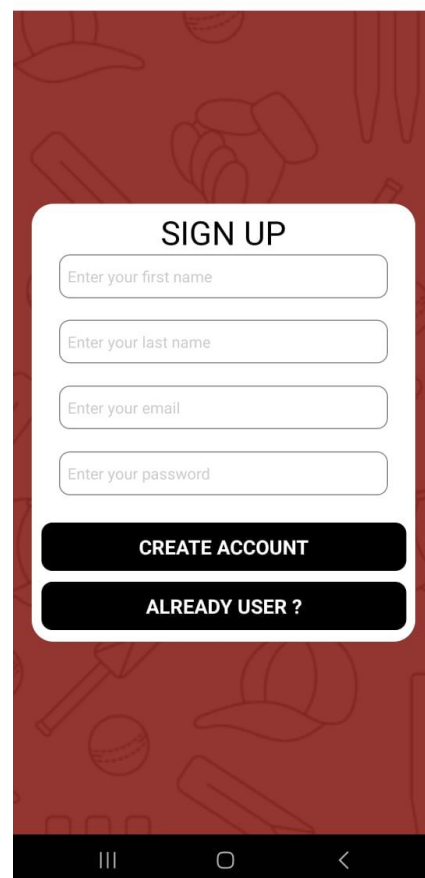
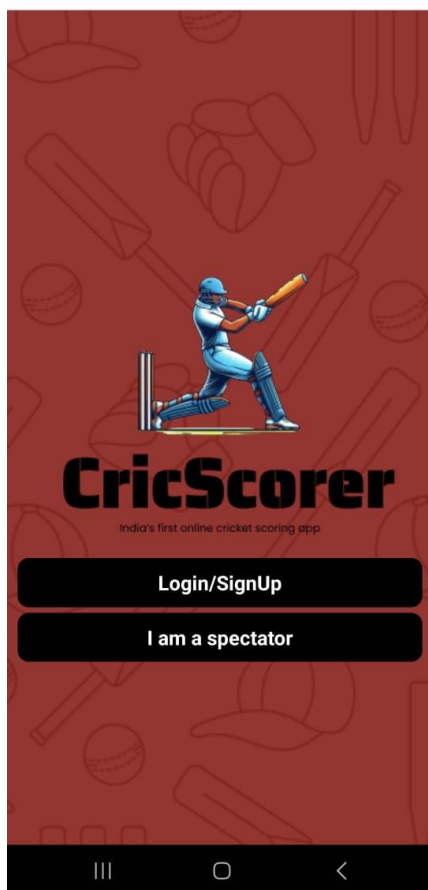
Cricket is a sport cherished globally, celebrated not just for its competitive nature but also for its detailed, data-rich. The game features comprehensive statistics and complex scoring method, necessitating precise scorekeeping to reflect its many intricacies. CricScorer is an app specifically crafted to cater these needs, providing a streamlined, effective, and user-friendly way to document, track, and analyze cricket scores in real time.

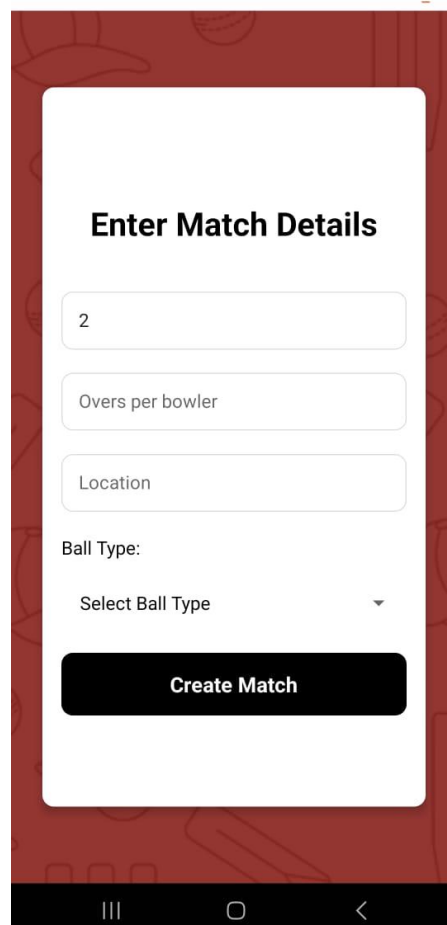
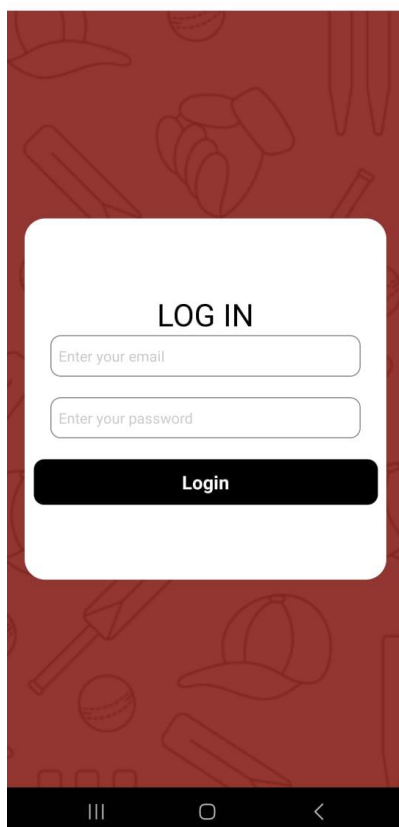
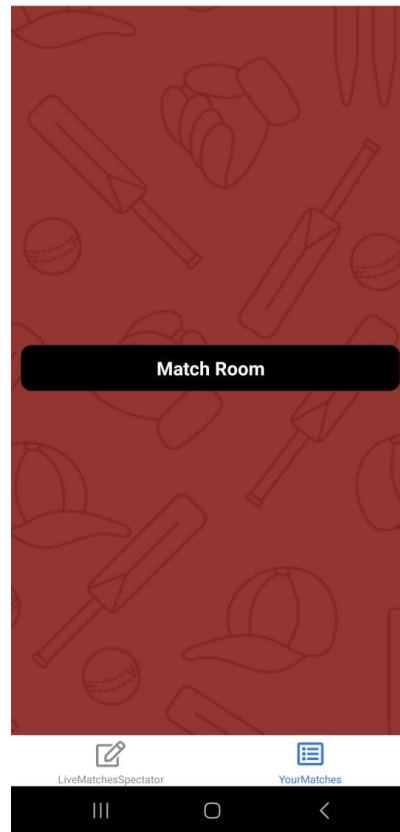
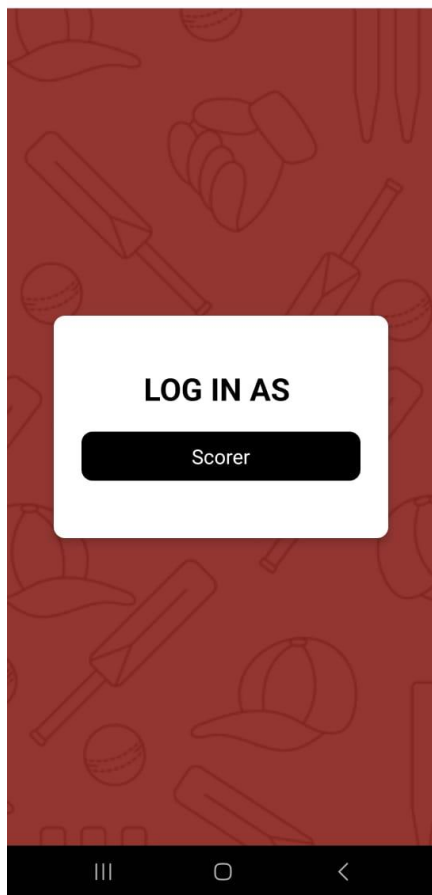
Conventional scorekeeping can often become cumbersome, involving complicated math and manual record-keeping. CricScorer makes this easier, enabling scorers to concentrate more on the unfolding game. With its intuitive and interactive interface, CricScorer allows users to maintain and retrieve accurate scores effortlessly. This app caters to all skill levels—from beginners keeping tabs on local matches to experienced professionals managing club tournaments or school competitions. Its responsive design and smooth functionality enable quick score entry, ensuring that no on-field action is overlooked.

CricScorer utilizes a cutting-edge technology stack to create an engaging scoring experience. The backend, powered by Express.js, manages data processing and API interactions, facilitating real-time score updates and smooth server communication. PostgreSQL acts as the database, reliably and swiftly storing match details, player data, and statistics. The frontend, constructed with React Native, offers a cohesive interface compatible with both iOS and Android devices, providing users with an accessible, cross-platform experience.

By blending advanced technology with a thorough understanding of cricket scoring needs, CricScorer allows users to easily collect and analyze game data. Whether for keeping personal records, overseeing club-level competitions, or providing live updates for fans, CricScorer enhances the cricket experience, making scorekeeping quicker, simpler, and more enjoyable for all participants.

Screenshots:





Register Teams

Register Teams

Toss Results

Who won the toss?

Dc

Dc2

Decision

Bat

Bowl

NEXT

Dc2

32/0 (2.0/2)

CRR: 16.00Projected Score: 32

Bowling: Dc

Target: 48

Dc won by 16 runs!

0123

456

WDNB BYELB

OUT

Dc

0/0 (0.0/2)

CRR: 0.00Projected Score: 0

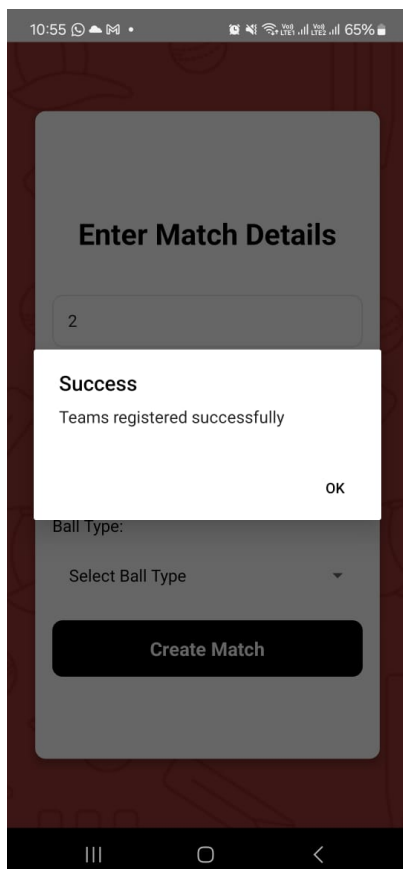
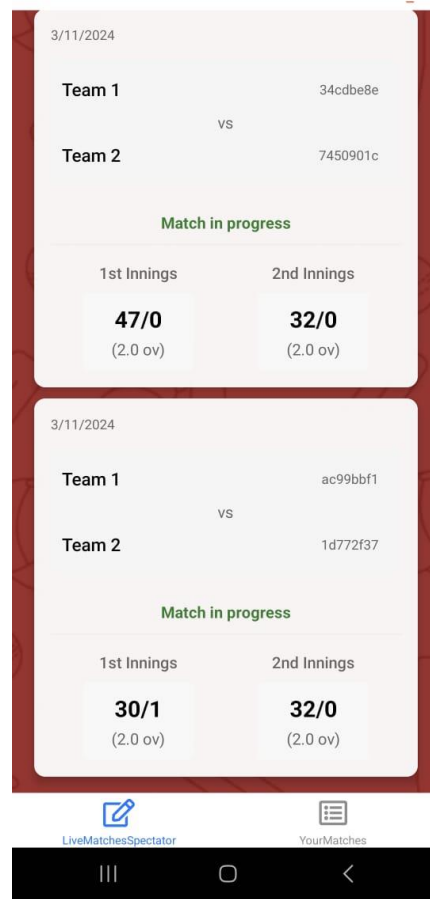
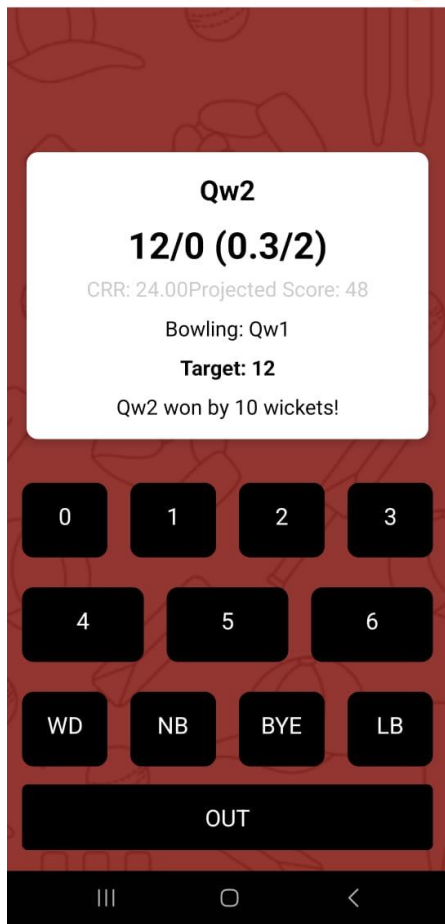
Bowling: Dc2

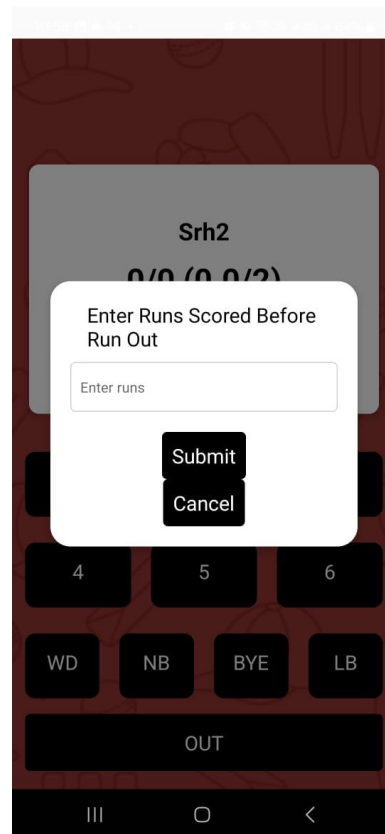
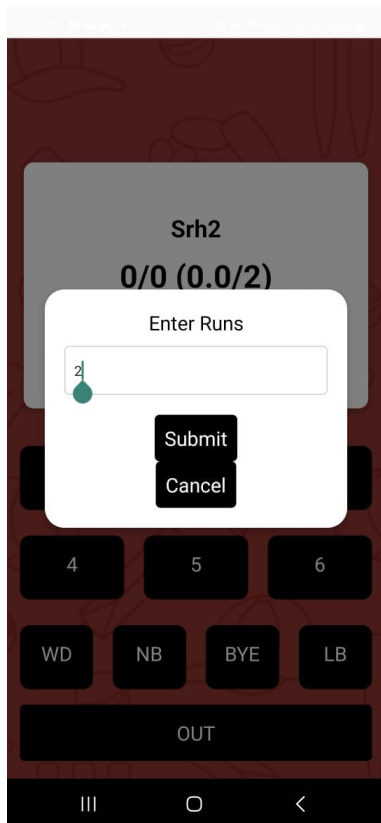
0123

456

WDNB BYELB

OUT

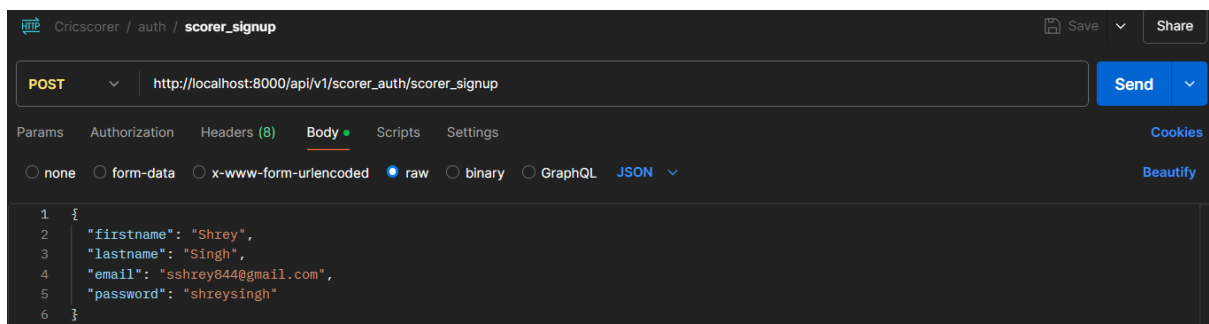




Backend Screenshots:

Backend endpoints:

Authentication:



HTTP Cricscorer / auth / **scorer_login** Save Share

POST ▼ https://cricscorer-backend.onrender.com/api/v1/scorer_auth/scorer_login Send ▼

Params Authorization Headers (8) **Body** • Scripts Settings Cookies

☐ none ☐ form-data ☐ x-www-form-urlencoded ☒ raw ☐ binary ☐ GraphQL **JSON** ▼ Beautify

```
1 {
2   "email": "ramram69@gmail.com",
3   "password": "12345678"
4 }
```

HTTP Cricscorer / auth / **scorer_logout** Save Share

GET ▼ http://localhost:8000/api/v1/auth/scorer_logout Send ▼

Params Authorization Headers (8) **Body** • Scripts Settings Cookies

☐ none ☐ form-data ☐ x-www-form-urlencoded ☒ raw ☐ binary ☐ GraphQL **JSON** ▼ Beautify

HTTP Cricscorer / auth / **player_signup** Save Share

POST ▼ http://localhost:8000/api/v1/player_auth/player_signup Send ▼

Params Authorization Headers (8) **Body** • Scripts Settings Cookies

☐ none ☐ form-data ☐ x-www-form-urlencoded ☒ raw ☐ binary ☐ GraphQL **JSON** ▼ Beautify

```
1 {
2   "name": "Shami",
3   "email": "shami15@gmail.com",
4   "password": "shami123",
5   "battingHand": "Right",
6   "bowlingStyle": "Fast",
7   "role": "bowler"
8 }
```

HTTP Cricscorer / auth / **player_login** Save Share

POST ▼ http://localhost:8000/api/v1/player_auth/player_login Send ▼

Params Authorization Headers (8) **Body** • Scripts Settings Cookies

☐ none ☐ form-data ☐ x-www-form-urlencoded ☒ raw ☐ binary ☐ GraphQL **JSON** ▼ Beautify

```
1 {
2   "email": "shami@gmail.com",
3   "password": "shami123"
4 }
```

Team Endpoint:

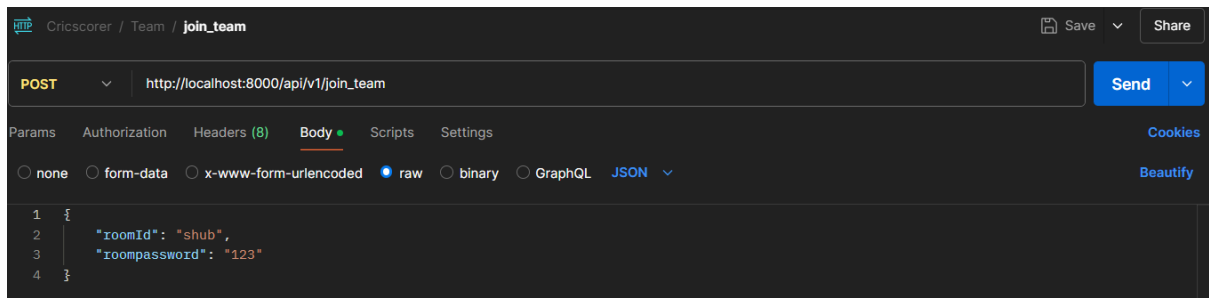
HTTP Cricscorer / Team / **createTeam** Save Share

POST ▼ http://localhost:8000/api/v1/teams Send ▼

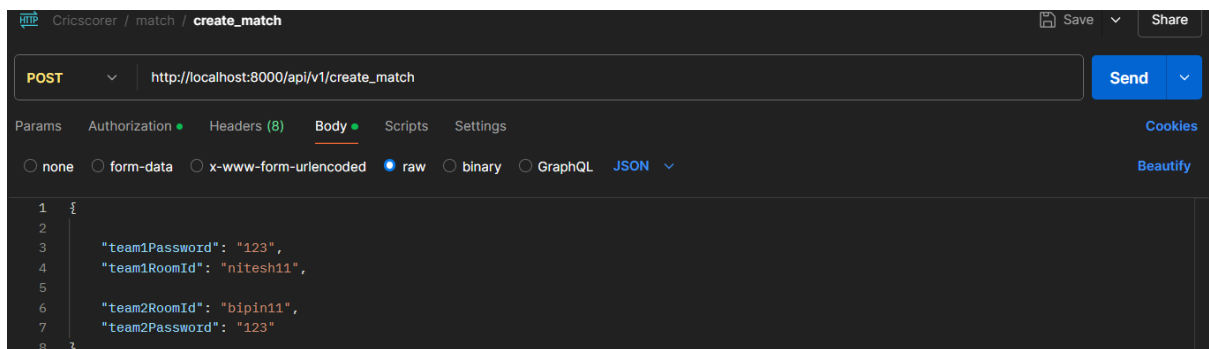
Params Authorization Headers (8) **Body** • Scripts Settings Cookies

☐ none ☐ form-data ☐ x-www-form-urlencoded ☒ raw ☐ binary ☐ GraphQL **JSON** ▼ Beautify

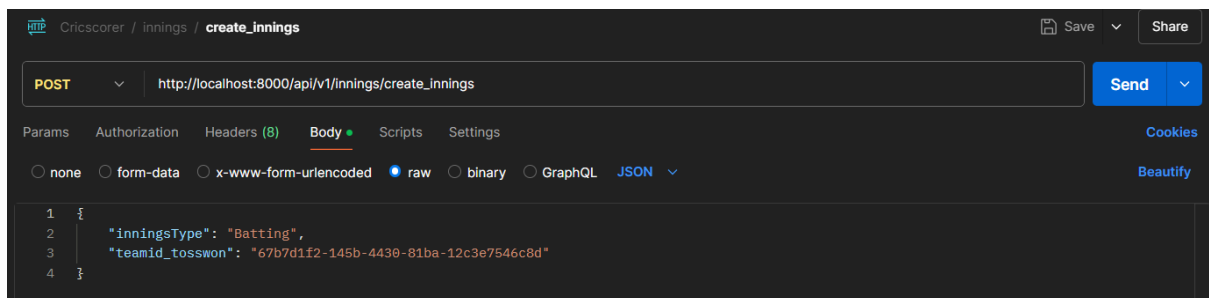
```
1 {
2   "name": "bipin11",
3   "roomId": "bipin11",
4   "roompassword": "123"
5 }
```



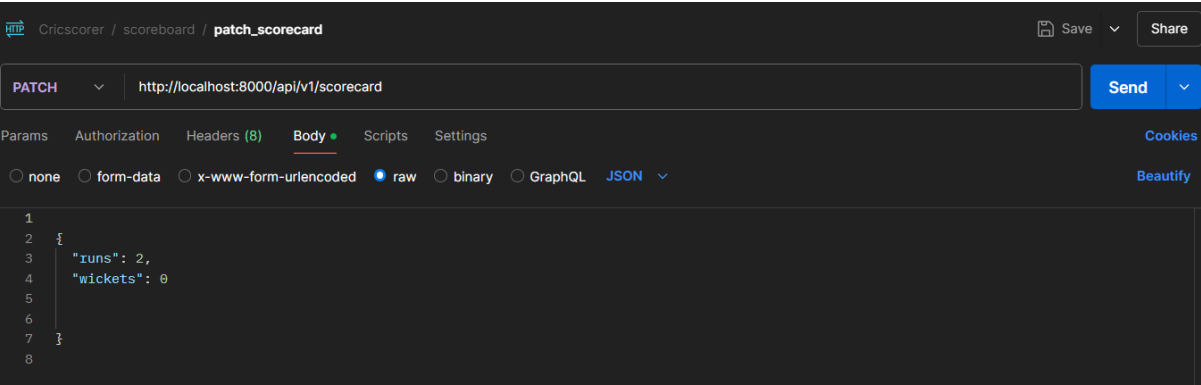
Match Endpoint:



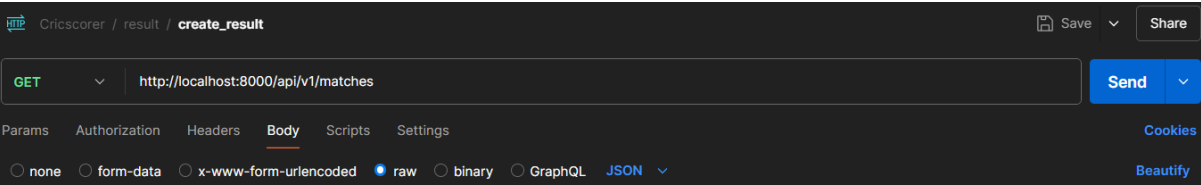
Innings Endpoint:



Scoreboard:



Results:



Database:

Match:

id A	team1Id A	team1 ()	team2Id A	team2 ()	overs #?	innings ()	result ()
0901b876-2b57-48f8-8650...	a2f6aa54-cc1e-4a20-aed0...	Team	d8f0e2ee-190e-4618-a101...	Team	null	3 Innings	1 Result
0a2aca42-6ddd-4df3-9555...	1af07387-2d89-45af-9c95...	Team	3a9112dc-61c5-44d0-9bd4...	Team	null	2 Innings	1 Result
0a2d416c-2374-43c9-b6b1...	d1da2982-029b-4e50-84cd...	Team	c48d81a-2c9f-43d4-837a...	Team	null	0 Innings	0 Result
0a8b1b9c-30ec-4524-8e17...	48e665e1-6c18-4ec1-9859...	Team	c4bd3346-4a41-40c4-ba80...	Team	null	1 Innings	0 Result
0c87288a-60e8-428e-b5fa...	a77b948b-05b3-4af0-ad26...	Team	3374e143-4767-4bd2-8f7f...	Team	null	2 Innings	1 Result
0f8078cf-0378-46dc-a07b...	fa9d5e34-87ff-4bc2-9a03...	Team	0d23c752-07aa-48ea-9787...	Team	null	1 Innings	0 Result
1aae46b1-0b39-48ad-a462...	fa9d5e34-87ff-4bc2-9a03...	Team	f4267c8b-4942-41eb-a09e...	Team	null	0 Innings	0 Result
1b24c6da-be53-42ee-943e...	d42a47b9-322f-4e09-9cfb...	Team	b19c2625-f98f-48b8-ad24...	Team	null	2 Innings	1 Result
1ca87735-5ffc-46be-865b...	2f3e9fd8-358b-4d0a-ba2c...	Team	6893bf2a-2997-4d1f-8f77...	Team	null	0 Innings	0 Result
1d01d811-8e40-4cfc-aa85...	f4267c8b-4942-41eb-a09e...	Team	0857907c-991a-47a5-a18c...	Team	null	1 Innings	0 Result
1d47eab1-1112-4957-9fd7...	c9d50c3a-e29d-49de-be0c...	Team	e8474f33-82f5-4482-a1b4...	Team	null	2 Innings	0 Result
21555f0b-2465-4c51-891d...	5fee59d5-3fc0-4933-8482...	Team	ca41525b-b364-47e3-9df5...	Team	null	1 Innings	0 Result

Scoreboard:

id A	inningsId A	innings ()	runs #	wickets #	overs #	createdAt
02509d19-2bd2-459d-90eb...	a7a91a8d-3638-4bc1-b444...	Innings	32	0	2	2024-11-03T08:49:43.622Z
02f31355-f3ef-44a1-876f...	358c5465-95a2-40a3-a1fd...	Innings	24	0	2	2024-10-21T06:27:43.361Z
0a1b4a69-b597-4ec1-a479...	98866c44-8b21-4429-bdb6...	Innings	15	0	2	2024-10-21T04:33:35.967Z
0d586ff1-7fb4-476b-b743...	9410a941-0ccd-429e-bfb0...	Innings	0	0	0	2024-10-21T03:10:34.629Z
132449e3-2496-4759-bf7d...	626921c4-df71-472d-b037...	Innings	30	0	2	2024-10-21T04:17:51.125Z
1711088d-6eba-4ecf-b44d...	6c673b14-4fe9-4457-8d57...	Innings	2	0	0.1	2024-10-20T17:32:38.849Z
198c2686-0e6f-48fc-8d27...	5422ca40-2004-4ade-9596...	Innings	0	0	0	2024-10-20T12:20:11.454Z
1e9b242c-9f9a-4602-bac6...	8804c623-9e75-45a5-9f6e...	Innings	15	0	1.3	2024-10-20T18:50:24.668Z
1f524d36-c173-4a08-959c...	350859f4-5a99-474d-89f0...	Innings	66	0	1.5	2024-11-03T09:06:23.566Z
23ad6ea0-1595-4288-bdb8...	13e7efd1-e163-44fe-91d5...	Innings	32	0	2	2024-11-03T08:50:54.854Z
246388ba-3f98-4a48-add1...	df88034e-6a73-4077-bcbd...	Innings	16	0	1.4	2024-11-03T09:13:27.083Z
264d8ff2-b774-4249-a800...	d927ab9f-c1e8-4ab5-b97d...	Innings	31	0	2.1	2024-10-21T07:29:25.172Z
2bb29887-a1c0-491c-b7ef...	6fefb63e-179e-43b5-b7c1...	Innings	10	0	1.5	2024-10-21T04:03:23.161Z

Teams:

Result X

ScoreCard X

Team ●

Player X

Match X

Innings X

+

Filters

None

Fields

All

Showing 100 of 133

Add record

Save 1 change

Discard changes

	id A	name A	roomId A?	roompassword A?	players {}	matches1 {}	matches2 {}	results {}
	004a5609-bf81-43eb-bd6c...	Goa1	Goa1	123	<div>Player</div>	<div>1 Match</div>	<div>0 Match</div>	<div>1 Result</div>
	017aad5f-1dc8-4010-a245...	TeamShubham	TeamShubham	456	<div>Player</div>	<div>0 Match</div>	<div>1 Match</div>	<div>1 Result</div>
	01b264b3-8596-4094-a179...	Tot4	Tot4	456	<div>Player</div>	<div>0 Match</div>	<div>1 Match</div>	<div>1 Result</div>
	01c83ef2-1d37-4bf5-b293...	Ho3	Ho3	123	<div>Player</div>	<div>1 Match</div>	<div>0 Match</div>	<div>1 Result</div>
	02c2a914-ca3a-46c0-90ad...	Data11	Data11	456	<div>Player</div>	<div>0 Match</div>	<div>0 Match</div>	<div>0 Result</div>
	03f7c3e8-4cb8-459b-9225...	shrey_12	shrey12	123	<div>Player</div>	<div>0 Match</div>	<div>1 Match</div>	<div>0 Result</div>
	06bcd751-973d-46cc-b073...	Tot2	Tot2	456	<div>Player</div>	<div>0 Match</div>	<div>2 Match</div>	<div>0 Result</div>
	0857907c-991a-47a5-a18c...	Pixel	Pixel	456	<div>Player</div>	<div>0 Match</div>	<div>1 Match</div>	<div>0 Result</div>

Innings:

Result	ScoreCard	Team	Player	Match	Innings											
G Filters None Fields All Showing 71 of 71 Add record																
	id	A	inningsNumber	#	inningsType	A	matchId	A	match	()	teamId	A	team	()	totalRuns	()
	05fda8a6-6d18-40d3-a25d...		1		Bat		a5143794-e646-40ca-98f0...		Match		a2a60ba5-000d-4e54-9407...		Team		1	ScoreCar
	0042a670-885a-492e-b3e4...		1		Bat		1b24c6da-be53-42ee-943e...		Match		d42a47b9-322f-4e09-9cfb...		Team		1	ScoreCar
	1324f207-9d79-4295-8998...		2		Bowl		430a4a30-a16d-4179-b4ad...		Match		ec0837d6-bcf6-444f-9358...		Team		1	ScoreCar
	13e7efd1-e163-44fe-91d5...		1		Bat		46900729-5c3a-48a1-8129...		Match		1d772f37-bb4d-4657-a704...		Team		1	ScoreCar
	14c54175-85a5-487d-909c...		1		Bat		0901b876-2b57-48f8-8650...		Match		a2f6aa54-cc1-4a20-aed0...		Team		1	ScoreCar
	14dae444-c44e-492b-a0ce...		2		Bowl		c142d0ee-3ae7-4d37-bbc8...		Match		3c502788-25d4-41e6-8b7f...		Team		1	ScoreCar
	15c8702e-2ec6-4785-8d25...		2		Bowl		c14be7e7-d565-4f56-8a49...		Match		dd47fffs-be54-4cfb-bb1f...		Team		1	ScoreCar
	17b8e476-7baf-41f6-b127...		2		Bowl		1d47eab1-1112-4957-9fd7...		Match		c9d50c3a-e29d-49de-be0c...		Team		1	ScoreCar
	1d6adb25-aceb-4fbb-bb32...		2		Bowl		58a9cb05-3244-40bd-a630...		Match		004a5609-bf81-43eb-bd6c...		Team		1	ScoreCar

Scorer:

Result X

ScoreCard X

Team ●

Player X

Match X

Innings X

scorer X

+

⌵

Filters

None

Fields

All

Showing 1 of 1

Add record

<input type="checkbox"/>	id A	firstname A	lastname A	email A	password A	createdAt	
<input type="checkbox"/>	51142bda-8959-4796-a801...	Ram	Ram	ramram6@gmail.com	\$2b\$10\$mkztl.ViUCoss4qq...	2024-10-20T11:21:42.103Z	

Backend deployed on Render:

Render

Dashboard

Blueprints

Env Groups

+ New

Shrey Singh's Workspace

criscorer / Production / criscorer_backend

WEB SERVICE

criscorer_backend

Node

Free

Upgrade your instance

Connect

Manual Deploy

sshkey15 / criscorer_backend

main

https://criscorer-backend.onrender.com

Events

Logs

Disks

Environment

Shell

Previews

Jobs

Metrics

Scaling

Your free instance will spin down with inactivity, which can delay requests by 50 seconds or more.

Upgrade now

Deploy live for 8d71464: error-fix

October 21, 2024 at 9:17 AM

Deploy canceled for 8d71464: error-fix

Another deploy started

October 21, 2024 at 9:11 AM

Deploy started for 8d71464: error-fix

Manually triggered by you via Dashboard

October 21, 2024 at 9:11 AM

References:

- Airbnb clone with React Native (Youtube tutorial for learning React Native).
- React Native docs

App link :

<https://expo.dev/artifacts/eas/qcDbJzviTqNMwjMFAT7wqi.apk>

Conclusion: CricScorer addresses the common challenges of cricket scorekeeping by offering a reliable, user-friendly, and comprehensive digital solution. With real-time scoring, seamless data storage, cross-platform compatibility, and a range of cricket-specific features, CricScorer streamlines the scoring process for match officials, players, and spectators alike. Through the efficient integration of technologies like Express.js, PostgreSQL, and React Native, this app transforms traditional cricket scorekeeping into a modern, accessible experience.