



ReactJS in the Era of Micro Frontends

Building Modular and Extensible User Interfaces

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ReactPlay Bangalore, Jan '24



\$whoami

- Kolkata >> Bangalore
- Systems Engineer @ TCS
- Ex-SDE Intern @ IIT Bombay, Hunar.ai
- Worked with 9+ start-ups
- 4x Hackathon Winner
- Always up for tea/coffee ☕



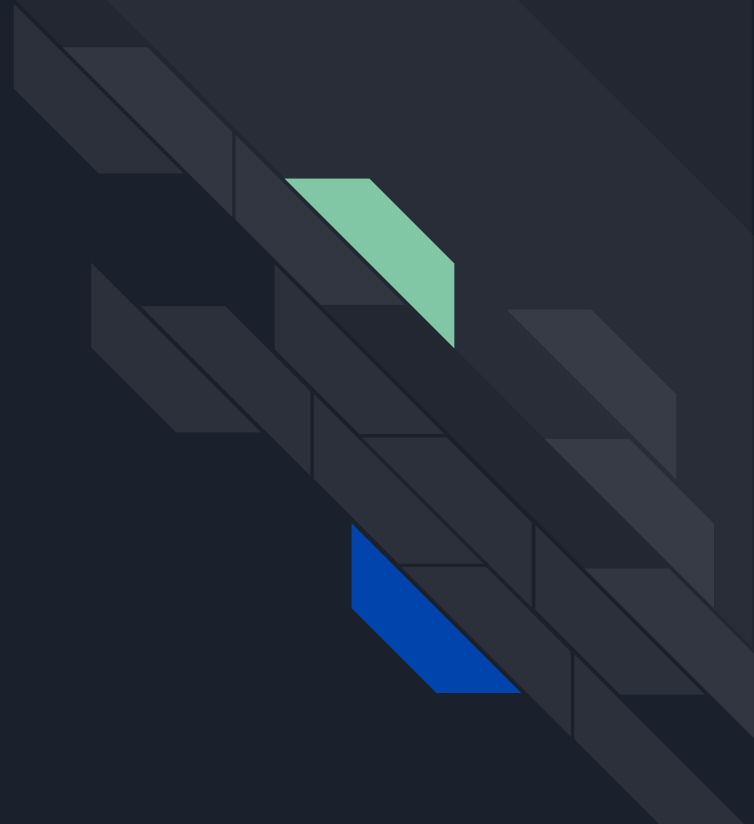
(n). *sha - yok*



Kya hein Agenda me?

Today's agenda

- What is Micro Frontend?
- Understanding different Architectures
- Flaws of Traditional Frontend Monoliths
- Benefits of Micro Frontends
- Micro Frontends inside React
- Communication Between Micro Frontends
- Some tools to help
- QnA





What is Micro Frontend?

Nothing but extending the idea of [micro-services](#) to the
frontend world!



Monolithic

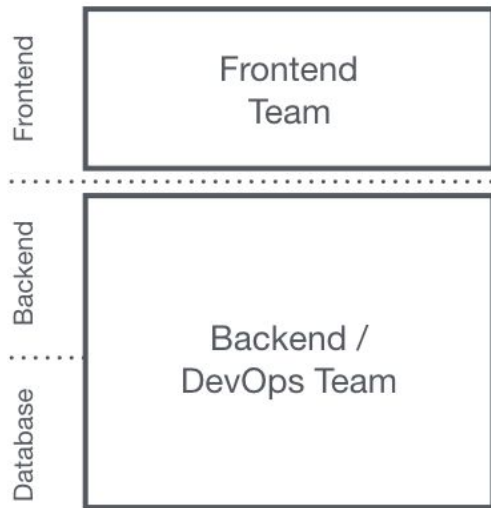


Micro services

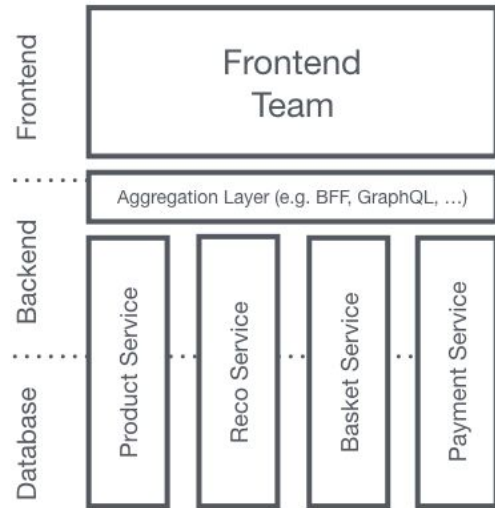
The Monolith



Front & Back



Microservices





But the frontend remains

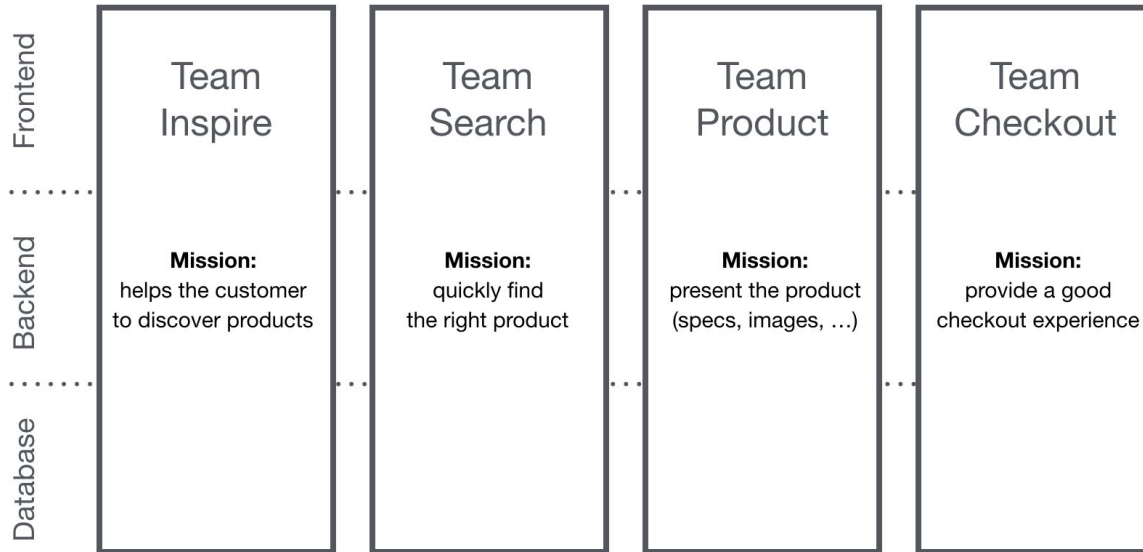
monolithic :(



Maintenance 🙄

Scalability ❌

End-to-End Teams with Micro Frontends





What we **achieved**?

Faster development 

Faster shipping 

Technology agnosticism and scalability 

Vertical domain ownership 



Micro Frontends inside **React** >>



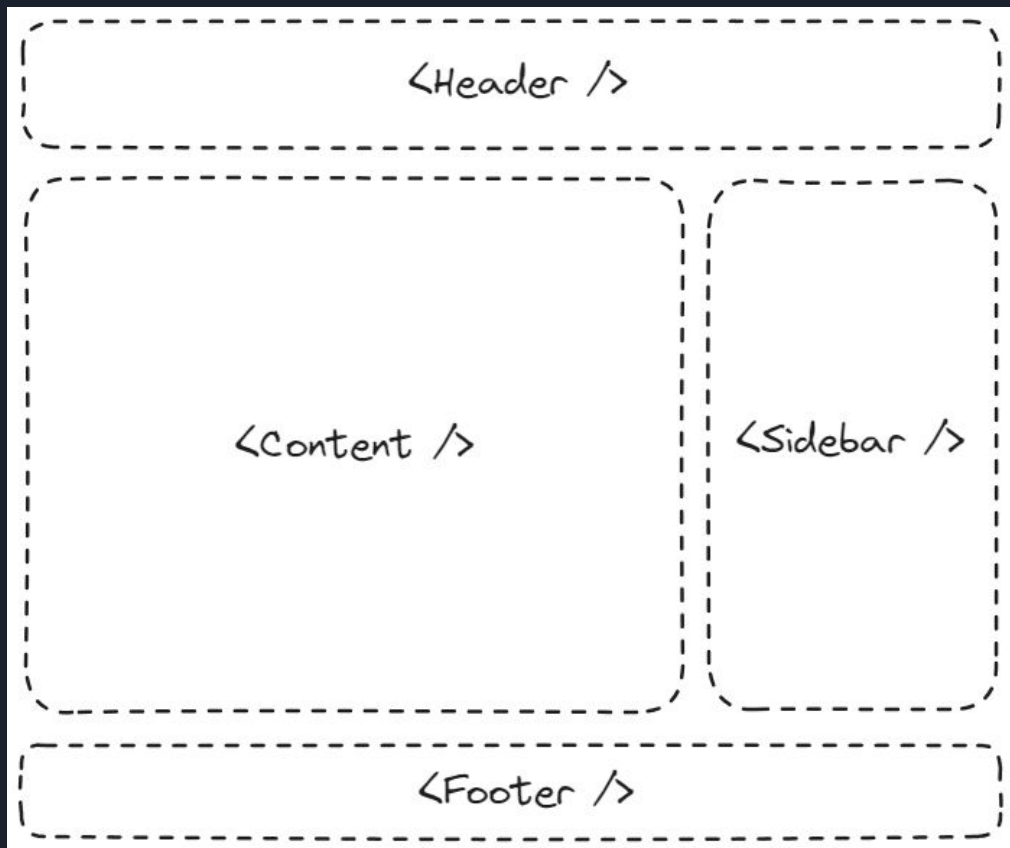
Logo

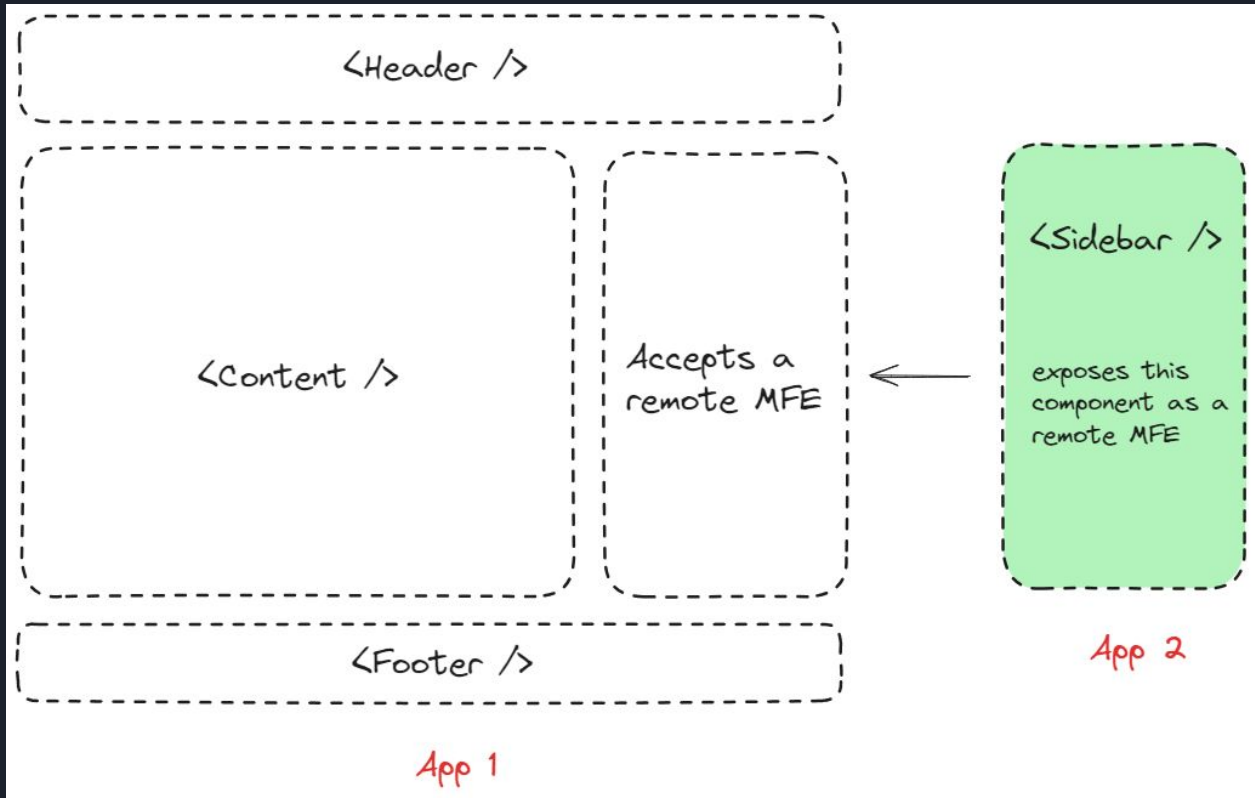
Home About Login

Blog details

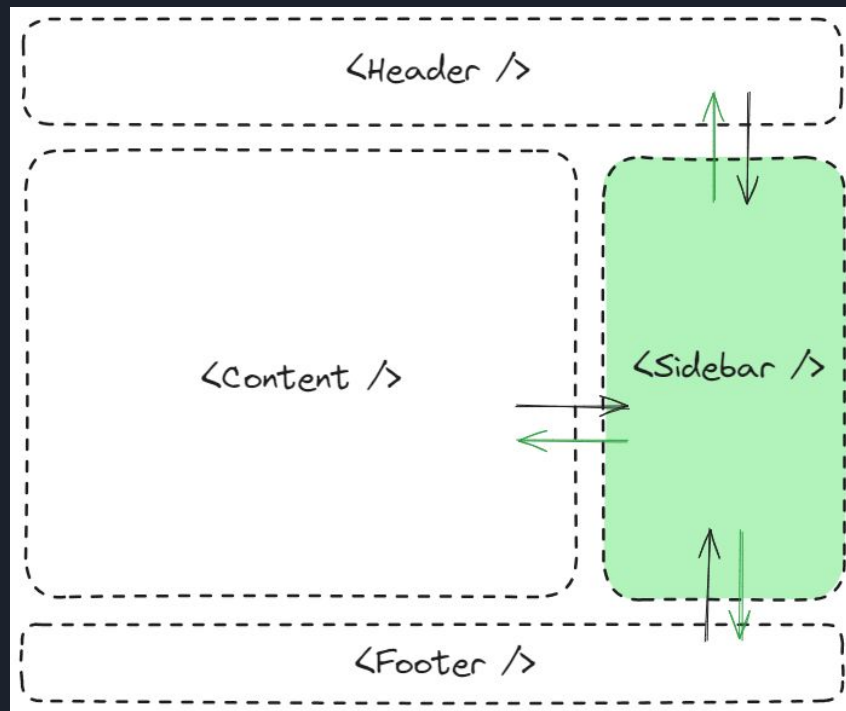
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Communication between Micro Frontends





Communication between **Micro Frontends**

1. Using props
2. Using Platform Storage Apis
3. Using Custom Events
4. Using a custom Message bus



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1. Tools:



Module Federation



single-spa

2. State management:



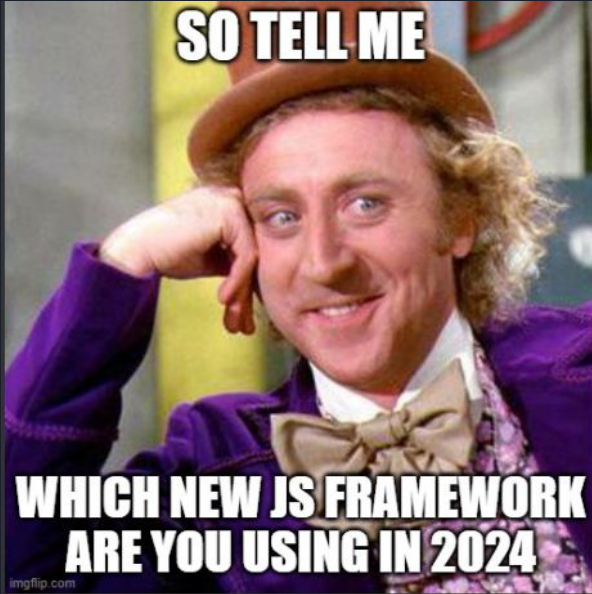
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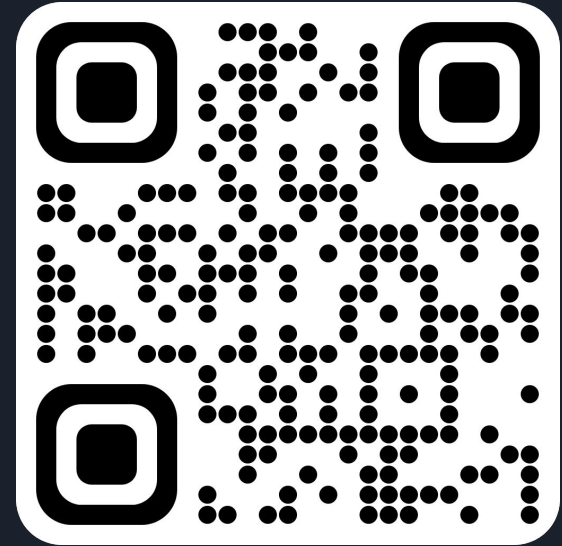
Microsoft
/redux-micro-frontend



**Thank you for being such a
lovely audience :)**



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Any questions?