

GROUP MEMBERS

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Framework Suggestion: React.js

React.js is a widely used JavaScript library developed by Facebook, which has undergone significant evolution since its inception. It has a well-documented history, making it an ideal choice for analyzing its architectural evolution.

1. Introduction

React.js is an open-source JavaScript library designed for building user interfaces, particularly single-page applications. It follows a component-based architecture and emphasizes declarative programming.

2. React.js Evolution from First Release to Latest Release

Version	Major Features
0.3.0 (2013)	Initial release with the concept of a virtual DOM for efficient UI rendering.
15.0.0 (2016)	Introduction of stateless functional components and ReactDOM for separating rendering logic.
16.0.0 (2017)	Fiber architecture overhaul for improved rendering performance. Error boundaries introduced.
17.0.0 (2020)	Streamlined upgrades with no new features; support for multiple versions of React on a page.
18.0.0 (2022)	Automatic batching, transitions, and new concurrent rendering APIs.

3. Contributions of Group Members

- **Asjad:**
 - Researched and documented the historical releases, including major features.
 - Compiled the architectural diagrams.
- **Zeeshan Ahmed:**
 - Curated and summarized release notes from official resources.
 - Proofread and formatted the final document for submission.

4. FIGURES



