

APPLICATION DEVELOPMENT FRAMEWORK UNIT : 49

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I chose React-Native Framework (Hybrid) to do this “todoNotes” app.

TodoNotes’s requirement analysis

- Able to Access Device features.
- Should be done in a short time period.
- Better UX.
- Anybody should be able to access (open source).

Justify

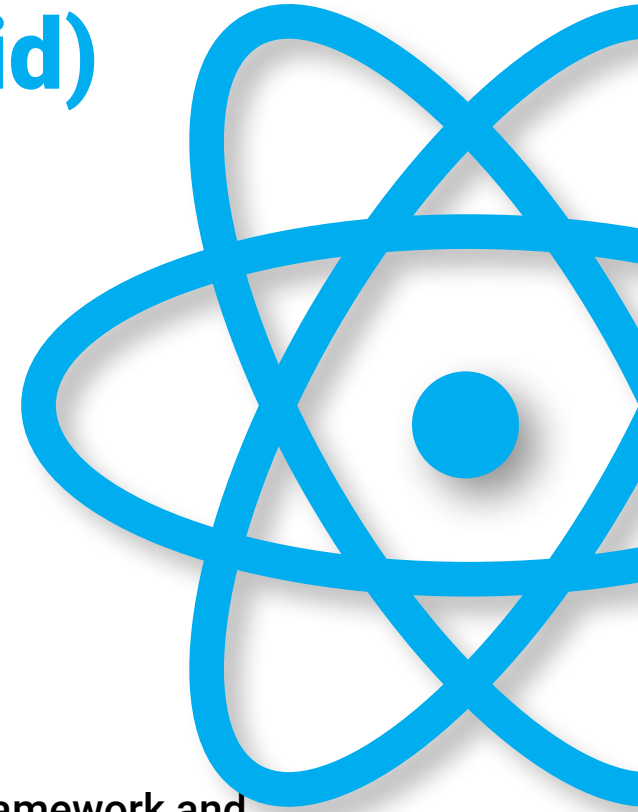
React-native is the best for this to-do notes app. it is facebook's cross-platform native framework and Facebook also gives us every single iOS and Android API, thus UI is totally native. The native app’s performance is still high.

We code once and it’ll run on both iOS and Android. our maintenance cost is low and developing time is short and we can create with JavaScript.

Lower Requirements and Faster to market

We could get the best functionality, user experience, the fastest and most responsive todoNotes app.

React Native is mature FrameWork, open-source and feature complete.



Pros & Cons of Mobile Frameworks

React Native (cross-platform) Frameworks

Pros

Cost and time-wise, react-native is better than other frameworks.
(Need to code at once for iOS and Android, faster to build and small team enough.)

React Native has a huge developer community, more help source.
(The popular framework, easy to learn and it has officially been debugged by default.)

UI also Simplified and feature access is complete.

Cons

React-native's performance is less than native because native's functionalities and delivery are better than react native.

Not efficient design-wise, React Native is less able to design or advanced interactions with others' frameworks.

Custom modules:Some time some specific components that you will be forced to build from scratch yourself.

Updating issues:Hard to keep the app updated with the latest version. Updating react-native versions is, in most cases a complex process.

Hybrid Frameworks



Pros

- Faster development
- Greater Market Reach
- Lower costs
- Wider audience
- Consistency between platforms
- Simplicity
- Inexpensive

Cons

- Lower performance
- Harder code design
- Long wait time for new features
- Integration Problems
- Poor UX
- Inefficient

Native Frameworks

1st Party Native



+



+



Pros

Highly secure

Good user experience

Full device integration

Responsive

Fast Performance

Apps Available in App-store and play-store

Cons

Costs a lot to develop

Runs only on one platform

Requires more developers

Subject to slow app store reviews

Progressive Web Frameworks



Pros

- Faster development
- Multi-platform capability
- Low cost to build,
- Offline usability
- Minimal storage

Cons

- Features access is limited.
- Performance is slower.
- Fewer functionalities.
- It an adolescent

Web Vs. Native Vs. Hybrid

	Native	Hybrid	PWA - web app
Long - Term investment protection	✓	✓	✗
UX & UI Standards	✓	✓	✗
Access to device feature	✓	✓	✗
Time to market	✓	✓	✓
Single codebase	✓	✓	✓
Requires network access	✗	✗	✓
Security and Quality assurance	✓	✓	✗
Inexpensive	✗	✗	✓
High-quality usability and performance	✓	✓	✗
Support for third-party integrations	✓	✓	✗
Open Source	✓	✓	✓
Maturity	✓	✓	✗

Value-Added Feature for “ToDoNotes”

Voice Notes (Voice Record)

Voice recording feature: it is used to take an audio todo notes. its help unable situation for typing and it save our small time.

I would like to add this feature, this feature is one of the options for add todo notes.

The audio note would have a title it should be easily identified the todo note.



Considerations done when deciding a mobile application framework

- **Time to market**
- **App Performance**
- **Feature Availability**
- **3rd Party Risks**
- **Hiring**
- **Integration**
- **Development Costs**
- **Maintenance Costs**
- **Security**

Favourite

The favourite mobile application is Facebook.
Biggest social network worldwide and 2.7 billion monthly active users as of the second quarter of last year. Easy for you to connect and share with family and friends online.

I love Facebook for its feature and UI. Mobile and web UI are very cool and easy to understand. we can post good quality image and video within more variety of size. It's helping to our personal and professional life, we can build a business in online. we can easily analyze our posts and able get some results. it's more engageable.

facebook

Reference and Source

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