## **Keynote**

- The goal of React has always been to easily build a great User Experience.
  - Fast startup
  - Responsive interactions
  - Delightful extras and polish
- To make it dramatically easier, we need to focus on the Developer Experience.
  - Low barrier to entry for basic features and sophisticated UI
  - High productivity
  - Ability to scale
- Agenda
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## State of React

- Over 1 billion times npm downloads/year
- 4 million React Developer Tools users
- Started to recommend react frameworks to start an app: Remix, NextJS, RedwoodJS, Expo

## React 19

- React Server Components make declarative, composable UI work seamlessly across client and server
- Server Rendering & Suspense

Declarative, composable HTML, Metadata, Scripts, Stylesheets



- Hydration
  - Better error reporting: visualize diffs on the props instead of multiple errors

- React Actions are not exclusive to Server Components frameworks - they also work on the client, even without a framework
- React Actions are first-class pattern for asyncronous data updates in response to user input
- React Actions are integrated with features like streaming, selective hydration, Suspense and Transitions

```
✓ Simple "reload everything" model
✓ Works without JS

✓ Limited feedback to user input
✓ Hard to add client behavior

✓ Instant feedback to user input
✓ Mix client and server behavior
✓ Async data management is hard
✓ Not interactive until JS loads
// HTML Action

// Event handler

// Event handler

// ...

// Event handler

// ...

// Not interactive until JS loads
/>
```

```
// HTML Action
<form action="/checkout" />

// React Action
<form
   action=[async (data: FormData) => {
      await submitDataToServer(data);
      redirect('/orders');
   }
//
```

```
// React Server Action (in a server module)
<form
   action=[async (data: FormData) => {
        'use server';
        await updateCartInDatabase(data);
        redirect('/orders');
   }}
/>
```

- JSX improvements
  - Ref is a prop, no need to use forwardRef()

## What's Next

React Compiler - automatically optimizes components and hooks, no need of memo() or useMemo()