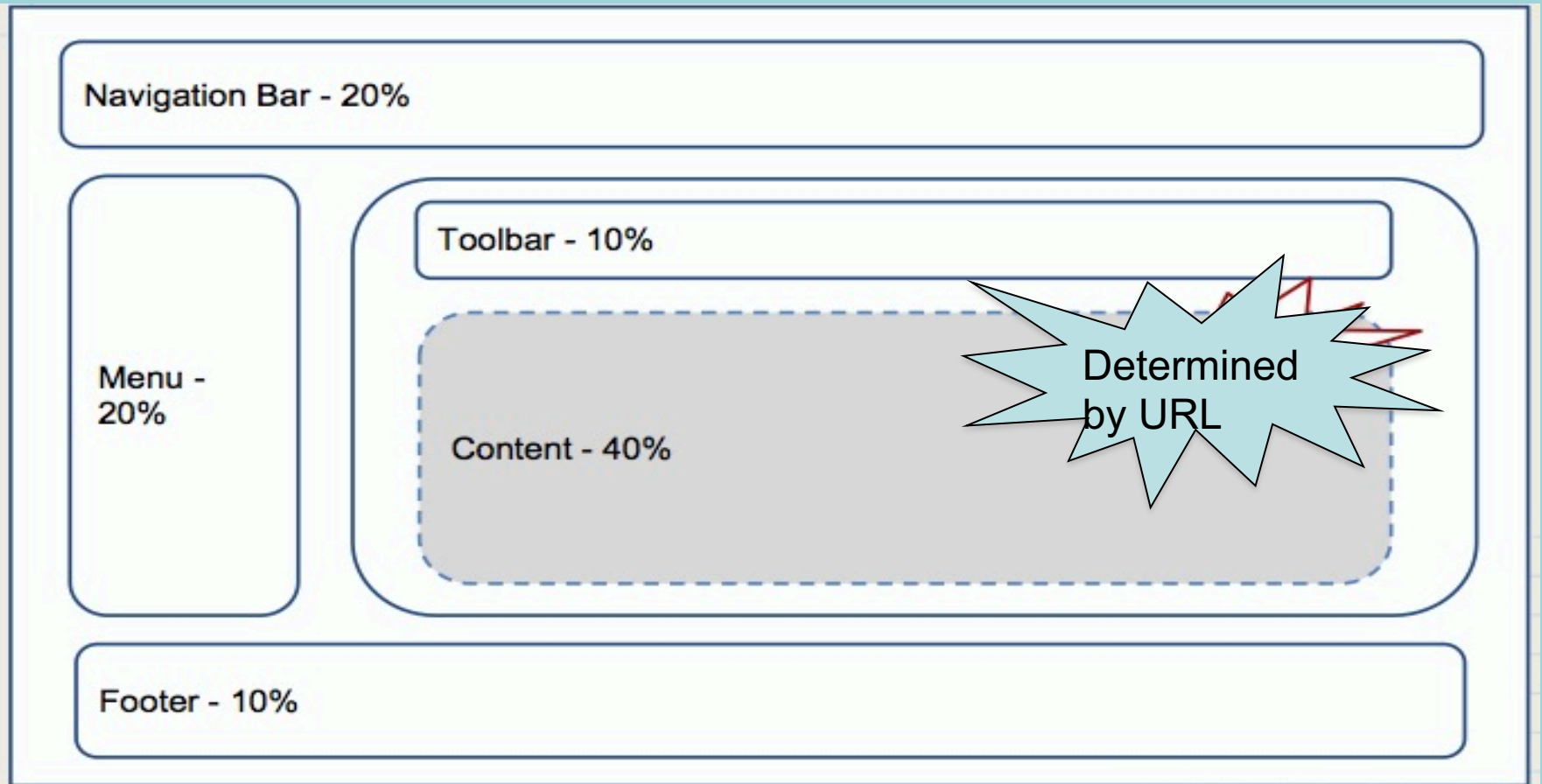


Navigation

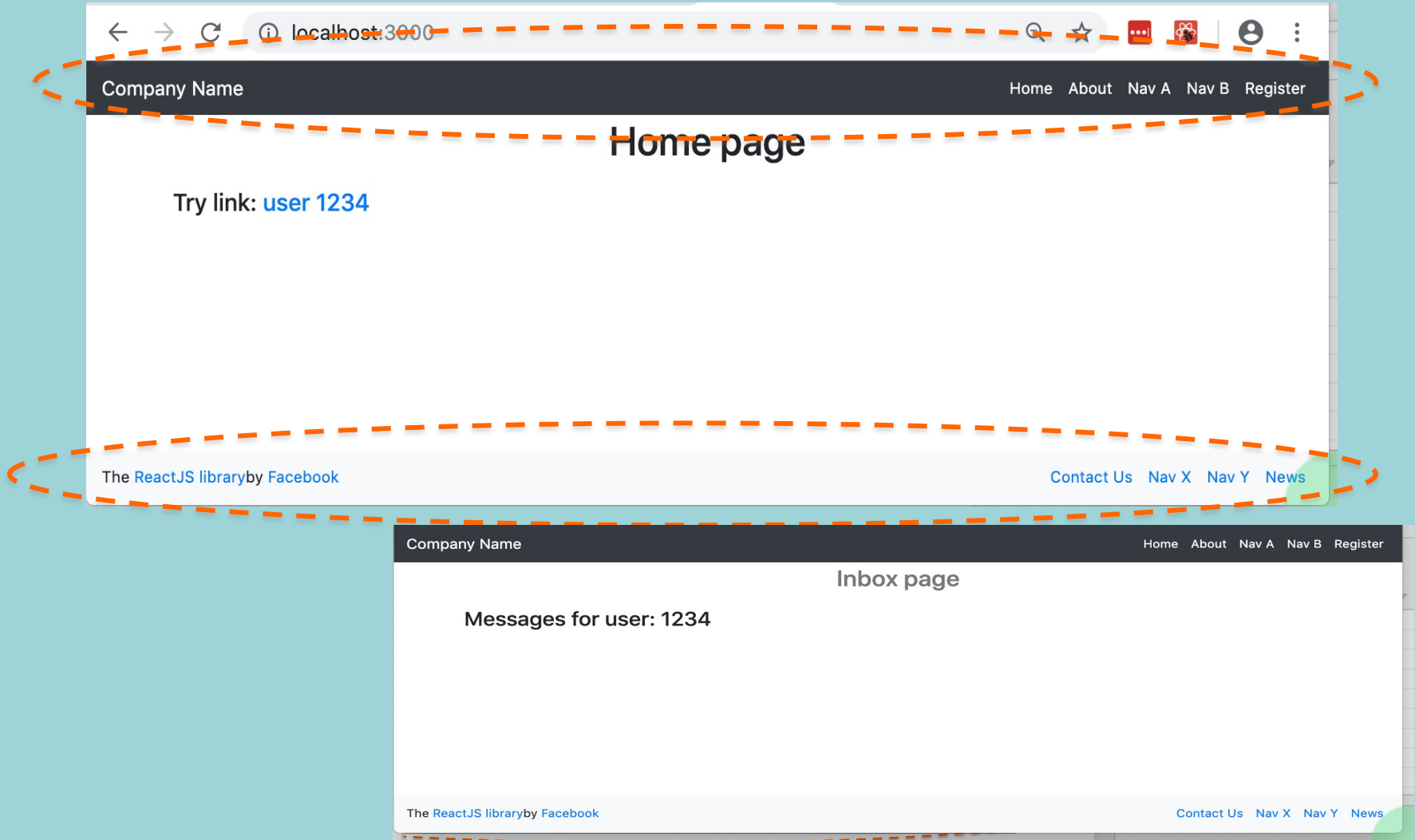
(Continued)

Typical Web app layout



Persistent elements/components

- **Use cases: Site-wide Headers. Footers. Side menus.**



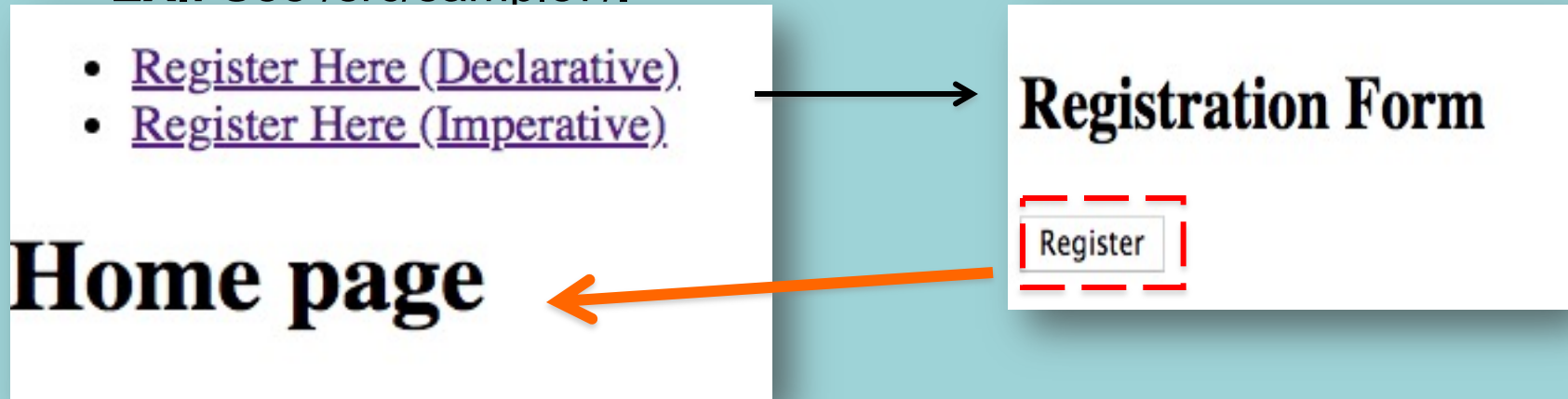
Persistent elements/components

- Ref. src/sample6

```
27  const App = () => {
28    return (
29      <BrowserRouter>
30        <Header />
31        <div className="container">
32          <Routes>
33            <Route path="/about" element={<About />} />
34            <Route path="/register" element={<Register />} />
35            <Route path="/contact" element={<Contact />} />
36            <Route path="/inbox/:userId" element={<Inbox />} />
37            <Route index element={<Home />} />
38            <Route path="*" element={<Navigate to="/" replace />} />
39          </Routes>
40        </div>
41        <Footer />
42      </BrowserRouter>
43    );
44  };
```

Programmatic Navigation.

- Performing navigation in JavaScript.
- Two options:
 1. **Declarative** – requires state; use `<Navigate />`.
 2. **Imperative** – requires the `useNavigate` hook provided by `react-router`
- **EX.:** See `/src/sample7/`.



Summary

- **React Router package adheres to React principles:**
 - **Declarative.**
 - **Component composition.**
 - **The event → state change → re-render**
- **Package's main components - <BrowserRouter>, <Route>, <Navigate>, <Link>.**
- **Special hooks to allow us access routing data/methods, e.g. useParams, useNavigate, useLocation.**

