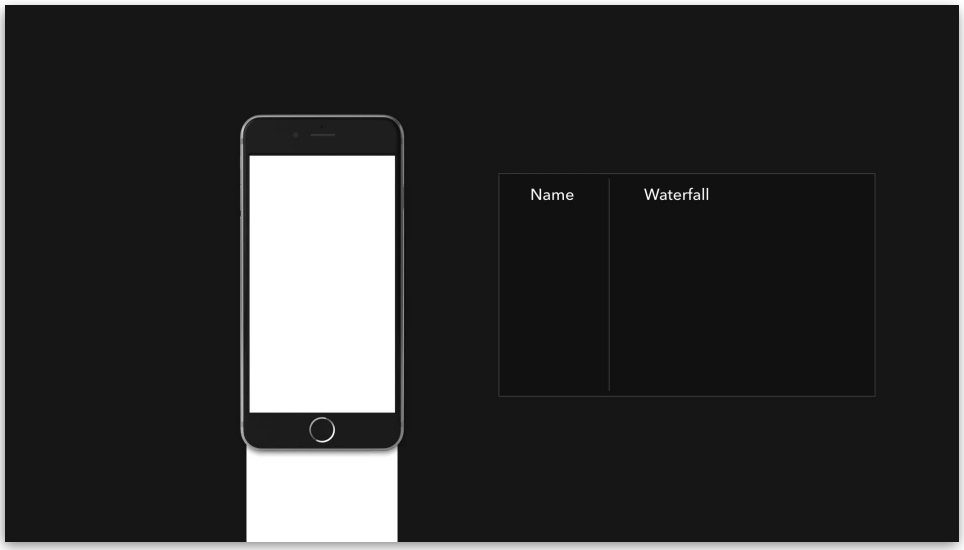
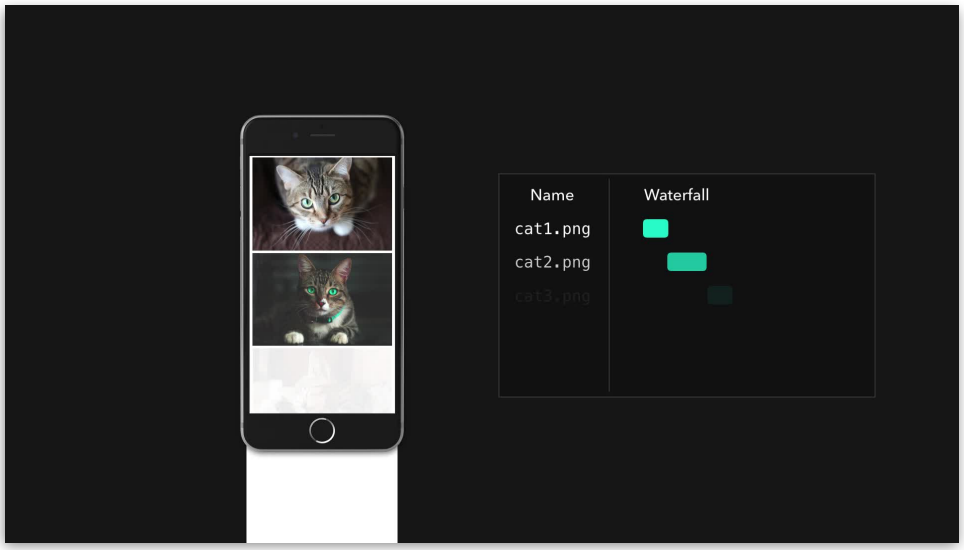
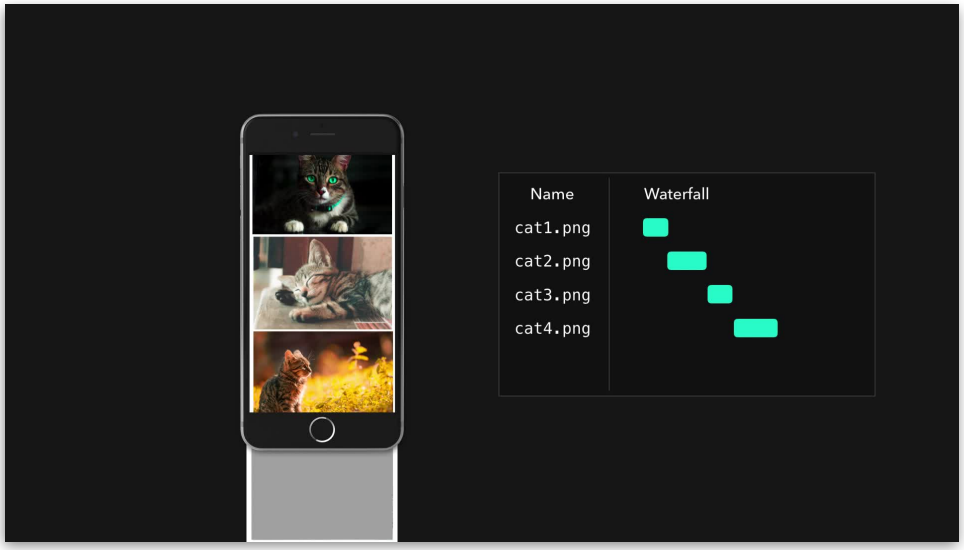
Import on Visibility

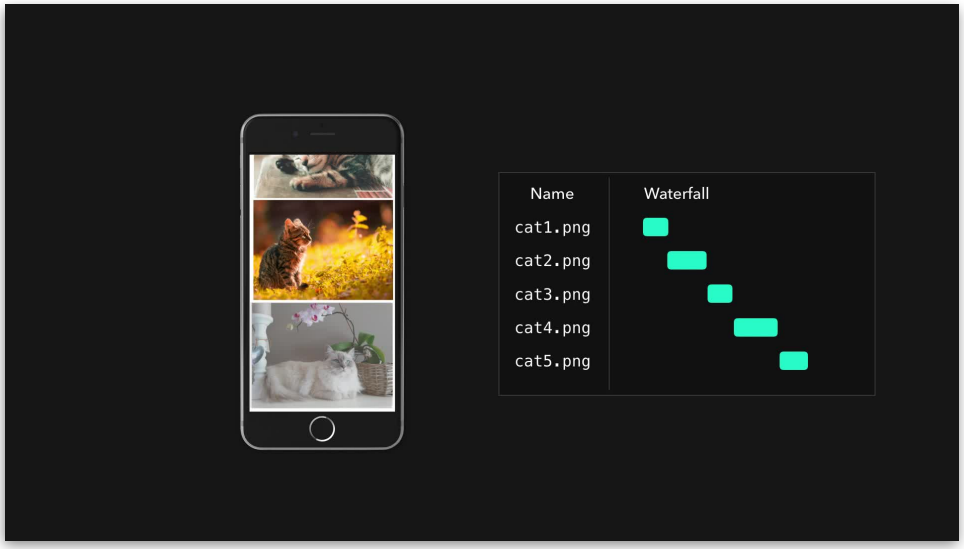
Load non-critical components when they are visible in the viewport

Besides user interaction, we often have components that aren't visible on the initial page. A good example of this is lazy loading images that aren't directly visible in the viewport, but only get loaded once the user scrolls.





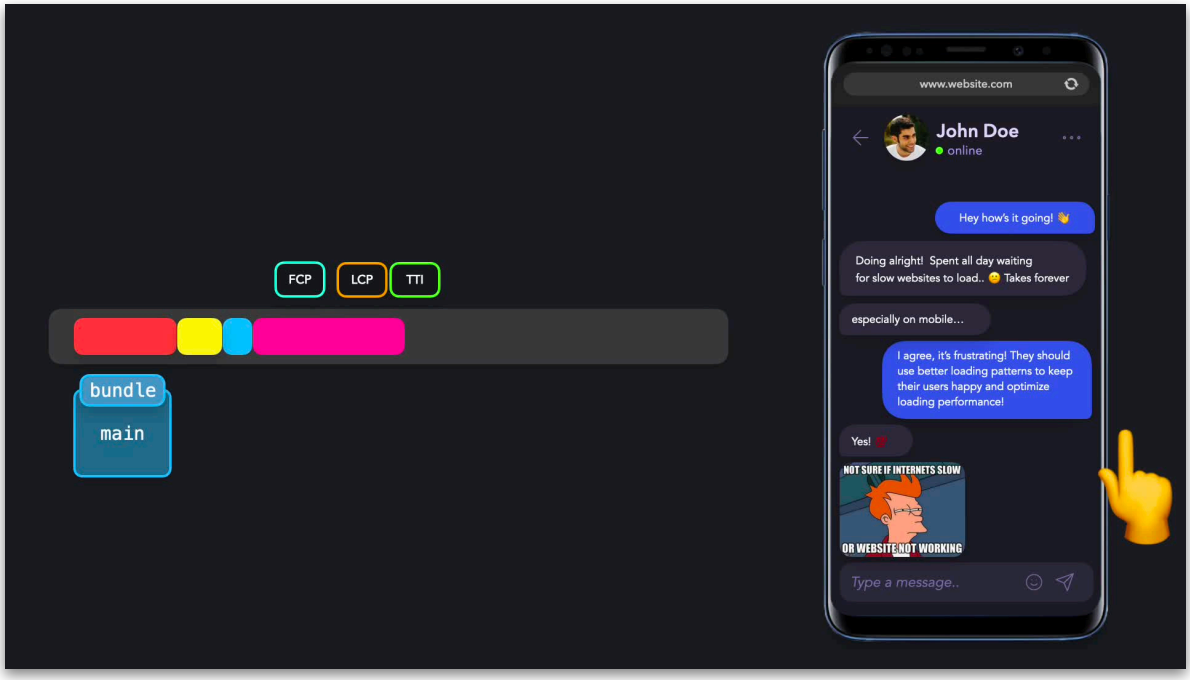


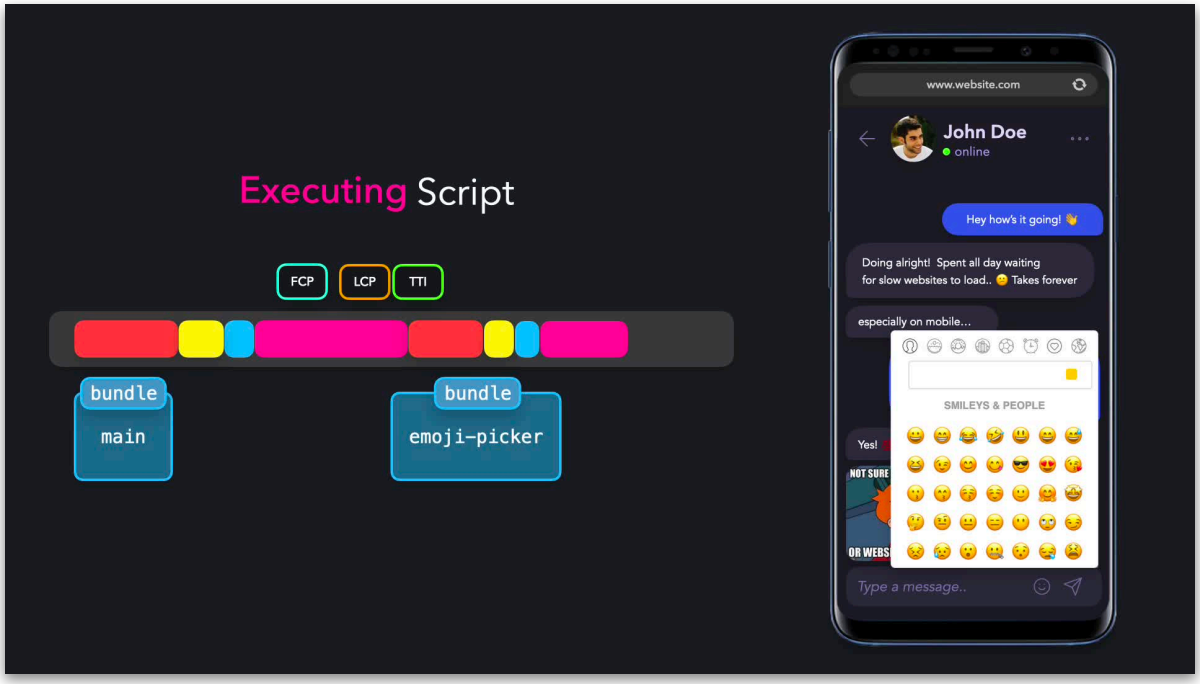


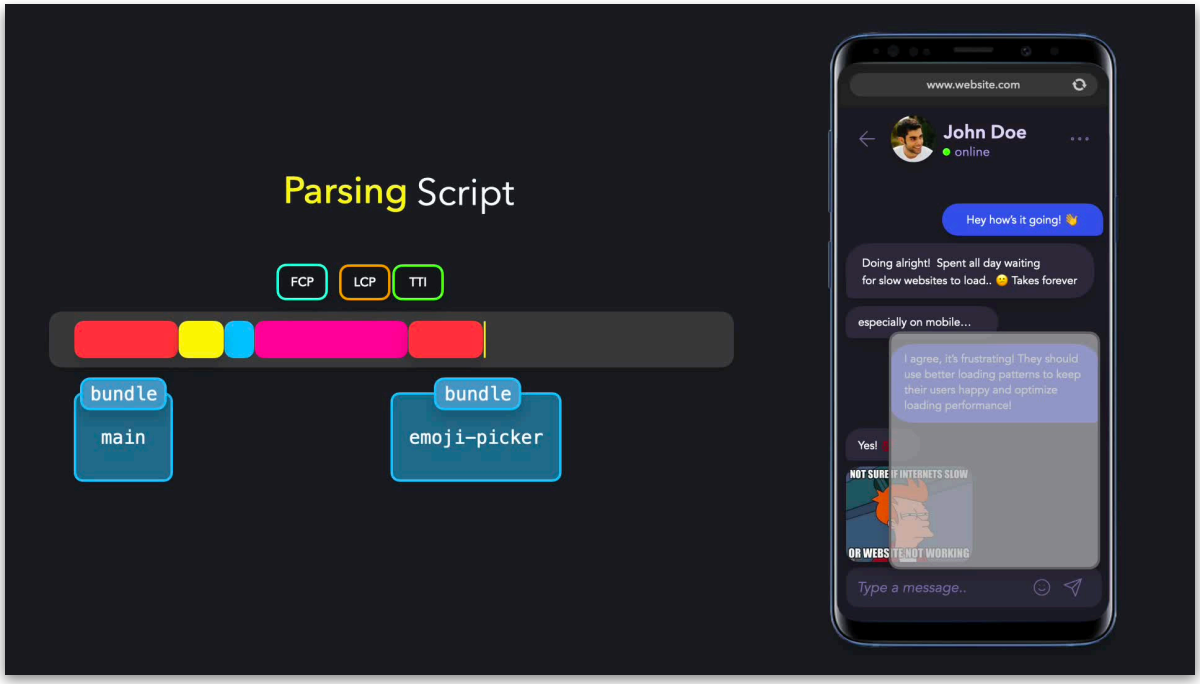
As we're not requesting all images instantly, we can reduce the initial loading time. We can do the same with components! In order to know whether components are currently in our viewport, we can use the `IntersectionObserver API`, or use libraries such as `react-lazyload` or `react-loadable-visibility` to quickly add import on visibility to our application.

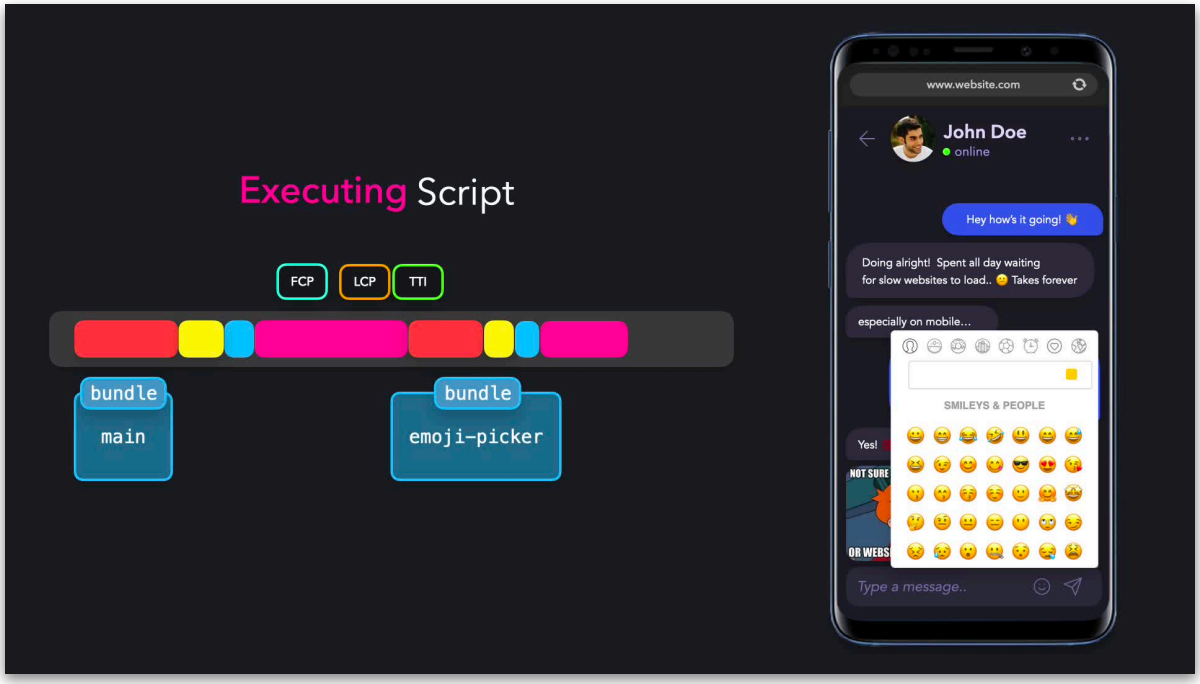
```
import React from "react";
import Send from "./icons/Send";
import Emoji from "./icons/Emoji";
import LoadableVisibility from "react-loadable-visibility/react-loadable";

const EmojiPicker = LoadableVisibility({
  loader: () => import("./EmojiPicker"),
  loading: <p id="loading">Loading</p>
});

const ChatInput = () => {
  const [pickerOpen, togglePicker] = React.useReducer(state => !state, false);

  return (
    <div className="chat-input-container">
      <input type="text" placeholder="Type a message..." />
      <Emoji onClick={togglePicker} />
      {pickerOpen && <EmojiPicker />}
      <Send />
    </div>
  );
};

console.log("ChatInput loading", Date.now());

export default ChatInput;
```

Whenever the `EmojiPicker` is rendered to the screen, after the user clicks on the Gif button, `react-loadable-visibility` detects that the `EmojiPicker` element should be visible on the screen. Only then, it will start importing the module while the user sees a loading component being rendered.


FCP
LCP
TTI
bundle
main
www.website.com
John Doe
online
Hey how's it going!
Doing alright! Spent all day waiting for slow websites to load.. Takes forever
especially on mobile...
I agree, it's frustrating! They should use better loading patterns to keep their users happy and optimize loading performance!
Yes!
NOT SURE IF INTERNETS SLOW
OR WEBSITE NOT WORKING
Type a message..


Executing Script
FCP
LCP
TTI
bundle
main
bundle
emoji-picker
www.website.com
John Doe
online
Hey how's it going!
Doing alright! Spent all day waiting for slow websites to load.. Takes forever
especially on mobile...
SMILEYS & PEOPLE
Yes!
Type a message..





The fallback component lets the user know that our application hasn't frozen: they simply need to wait a short while for the module to be loaded, parsed, compiled, and executed!