Use Case Diagram

Colors (TinyColor)

UC-1

Color Mind API

Color Mind API Service

Generate Colors

FR18, FR47, FR49

<include>

<extend>

Format Colors

FR17B, FR17C

Return Colors

FR47

<extend>

Set Colors

FR10

Convert Color Models

FR15

Palette

Adjust Colors

FR14

Recieve Colors

FR10, FR17B

TinyColor
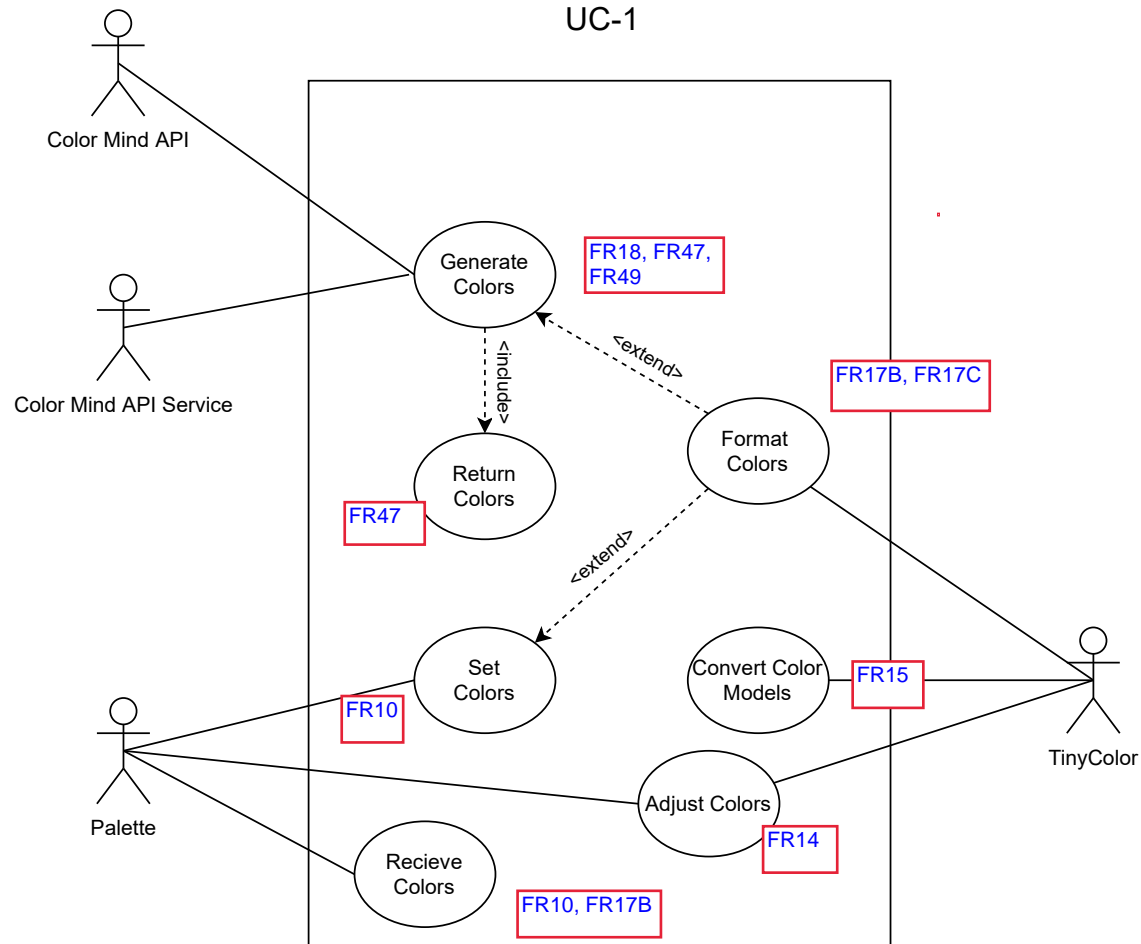
Use Case Diagram

Color Pairs

UC-2

Contrast Checker
API Service

Contrast Checker
API

Palette

Get Color Pair
Contrast Ratings

FR48

<include>

Return Color Pair
Contrast Ratings

FR48

Create
Color Pairs

FR16

<include>

Estimate
Color Pair's
Contrast Ratings

FR17

<include>

Store Color Pairs
in Array

FR16

Update Color Pair
Contrast Ratings

FR42,
FR17,
FR10
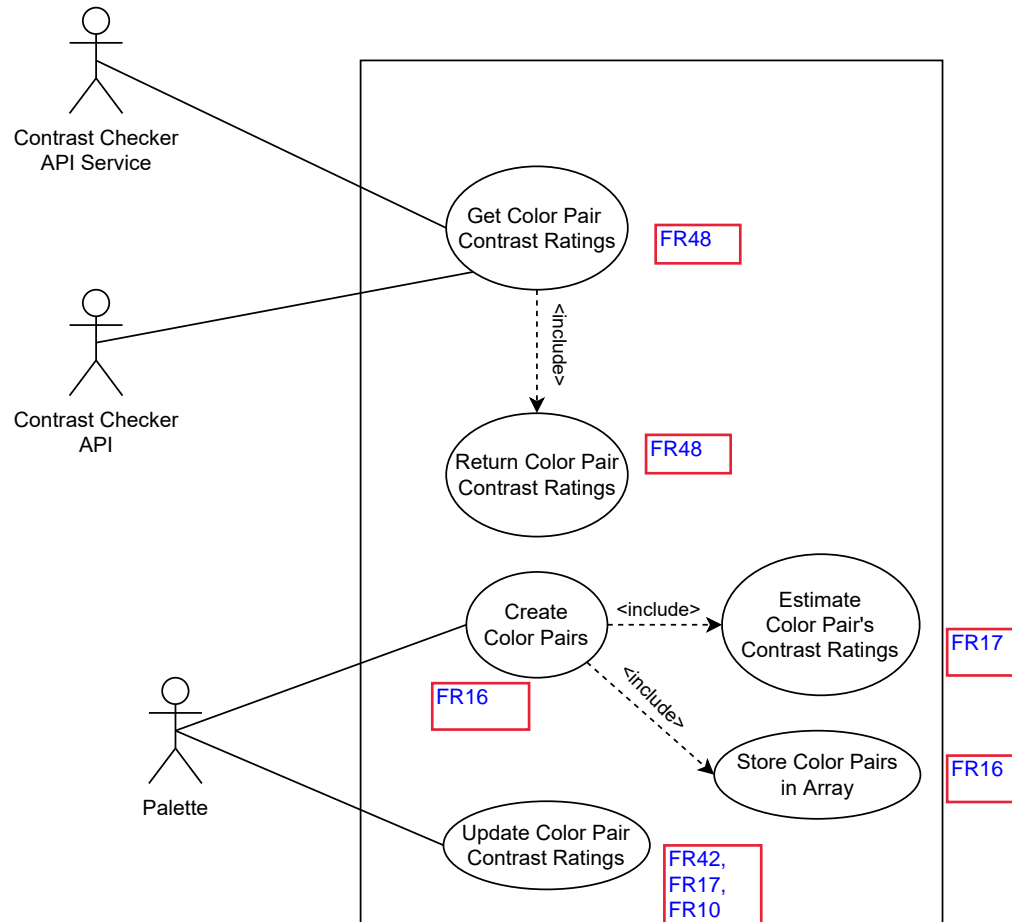
Use Case Diagram

User-Control Panel Interaction

UC-3
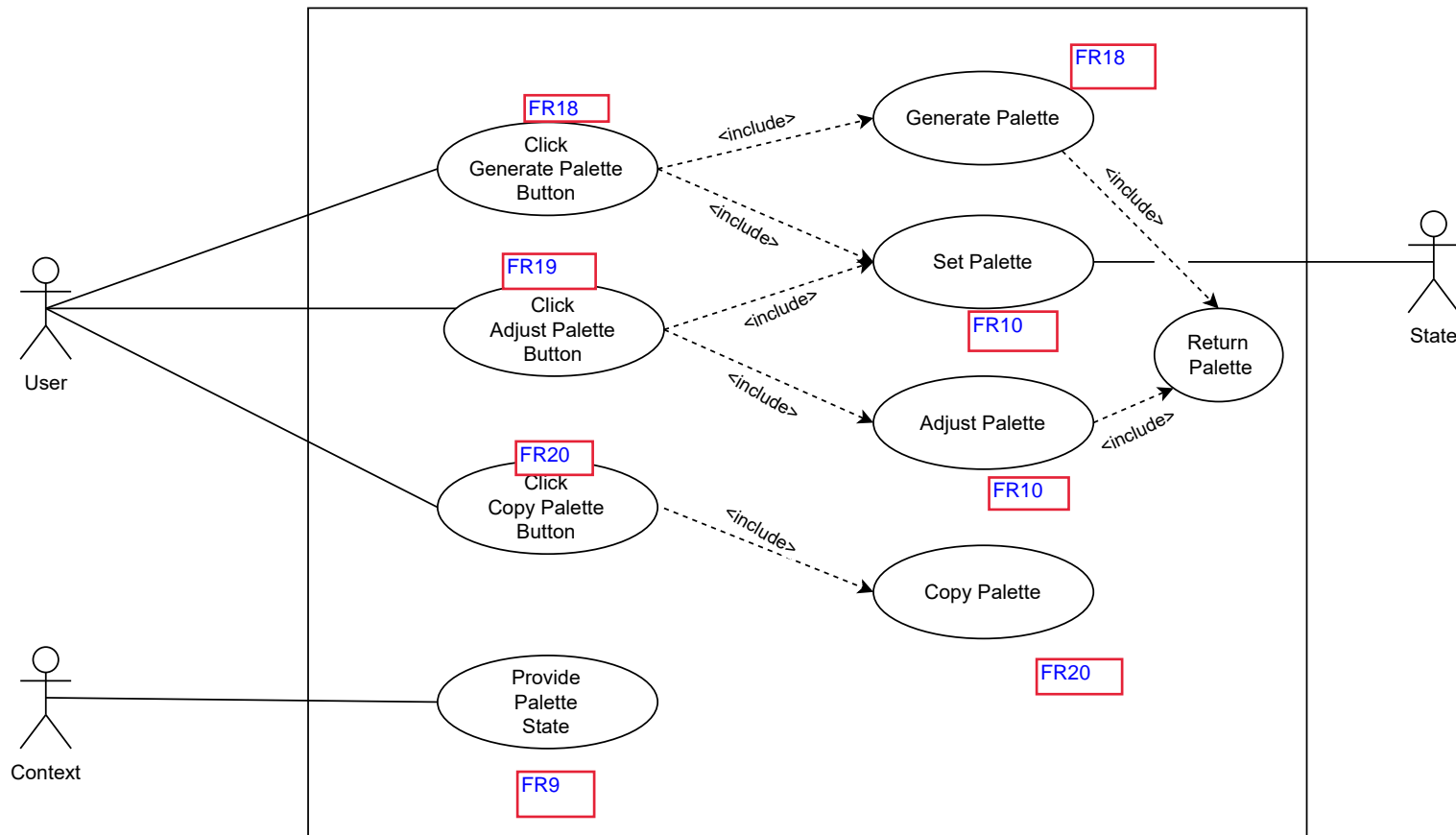
Use Case Diagram

Page Viewing from Navigation Panel

UC-4

User

Router

View Page
FR4

Go to
Mock Site Page
FR27,
FR34

Go to
Contrast Checker
Page
FR28,
FR36

Go to
About Us
Page
FR29

Click Page
Links
FR27, FR28, FR29
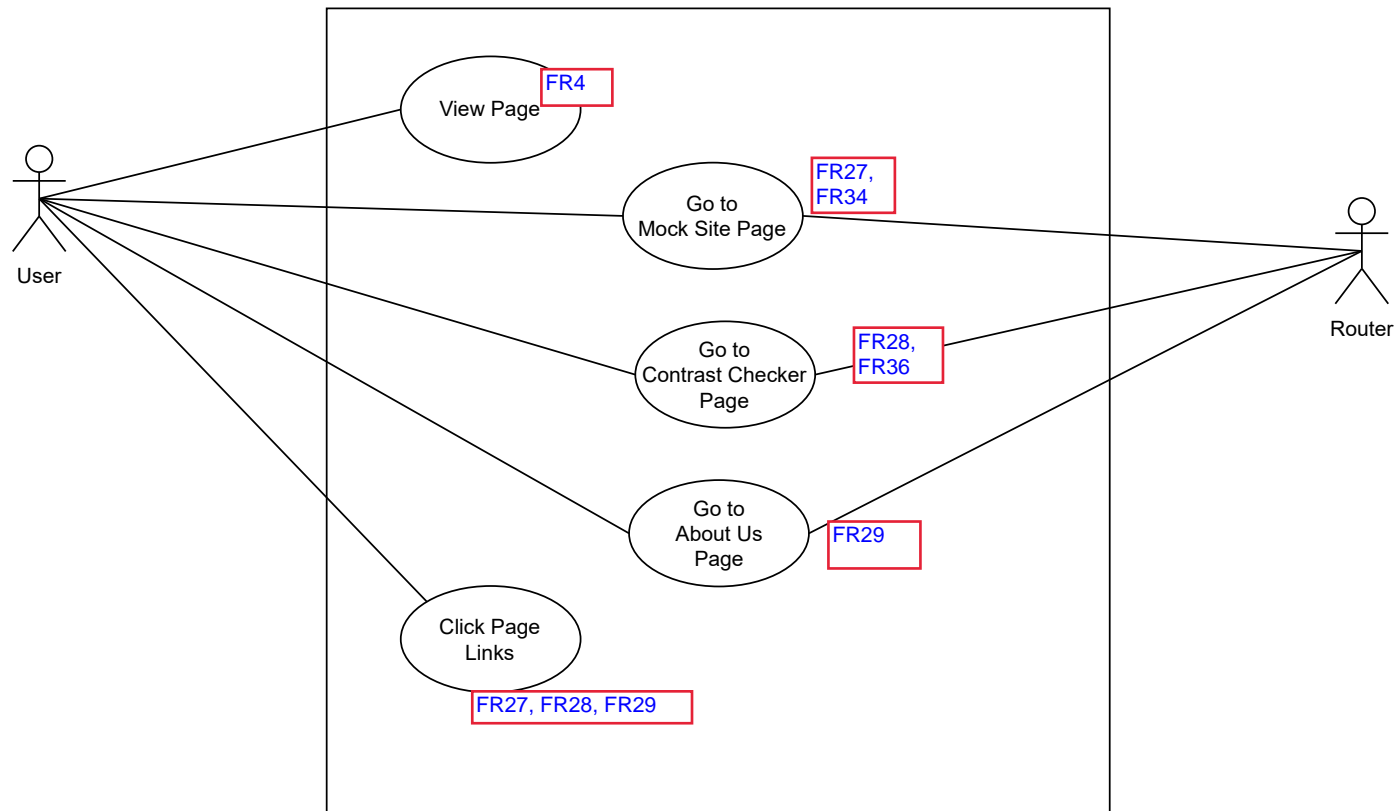
Use Case Diagram

Page Viewing from Address Bar

UC-5

User

Router

View Page
FR4

Go to
Mock Site Page
FR34,
FR45

Go to
Contrast Checker
Page
FR45

Go to
About Us
Page
FR45

Go to
Error Page

Type
Page URL
FR44

Type
Invalid
Page URL
FR46
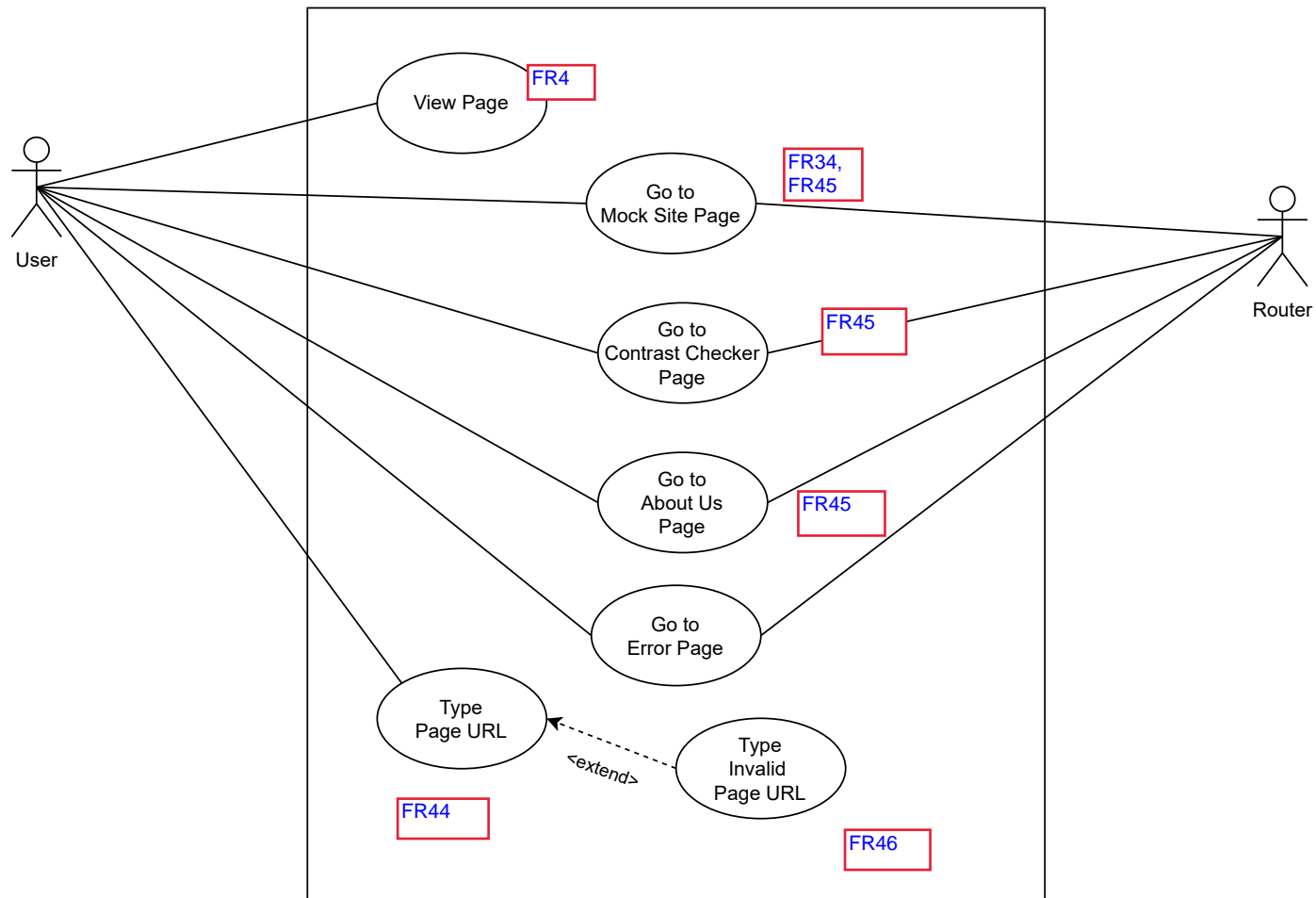
Use Case Diagram

Context Hook

UC-6

Create Context — FR9, FR9A

Create Palette State — FR9, FR9A

Create Context Provider — FR9, FR9A

Assign State To Context Provider — FR9, FR9A

Connect Children Components to Context Provider — FR9C

Use Palette State — FR11A

Use Context to Retrieve State — FR11

Set Palette State — FR10

Palette Context

Parent Component

Child Component
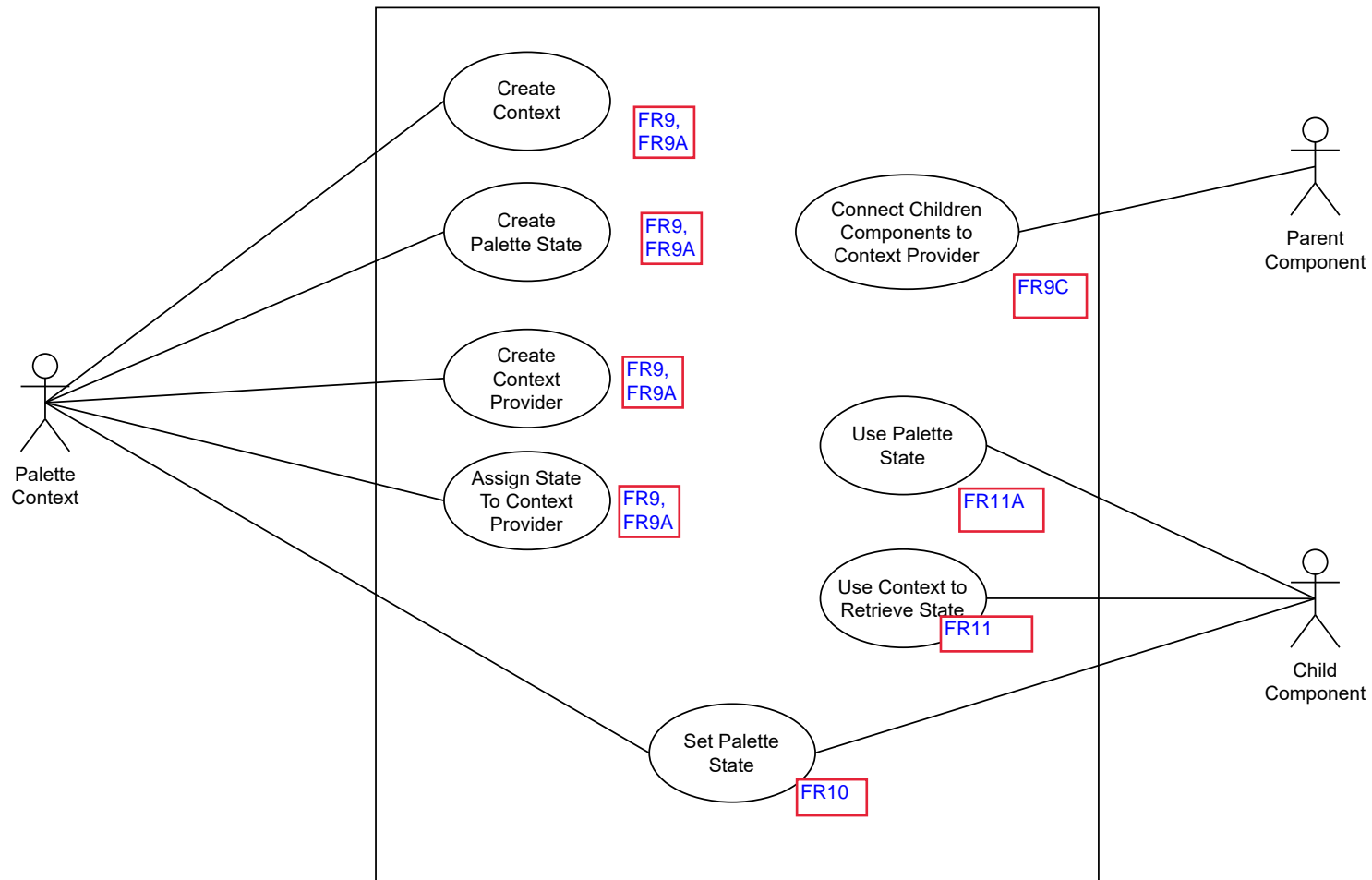
Use Case Diagram

Color Mind API Service (Color Generation)

UC-7

Color Mind API Service (actor)

Color Mind API (actor)

Palette (actor)

Tiny Color (actor)

- Send Request to API
- Send Response
- Handle Response
- Log Error — <extend>
- Call API Service
- Alert Error
- Generate (New) Palette from Colors
- Return Colors or Null — <include>
- Convert Response to Formatted Colors — <extend>
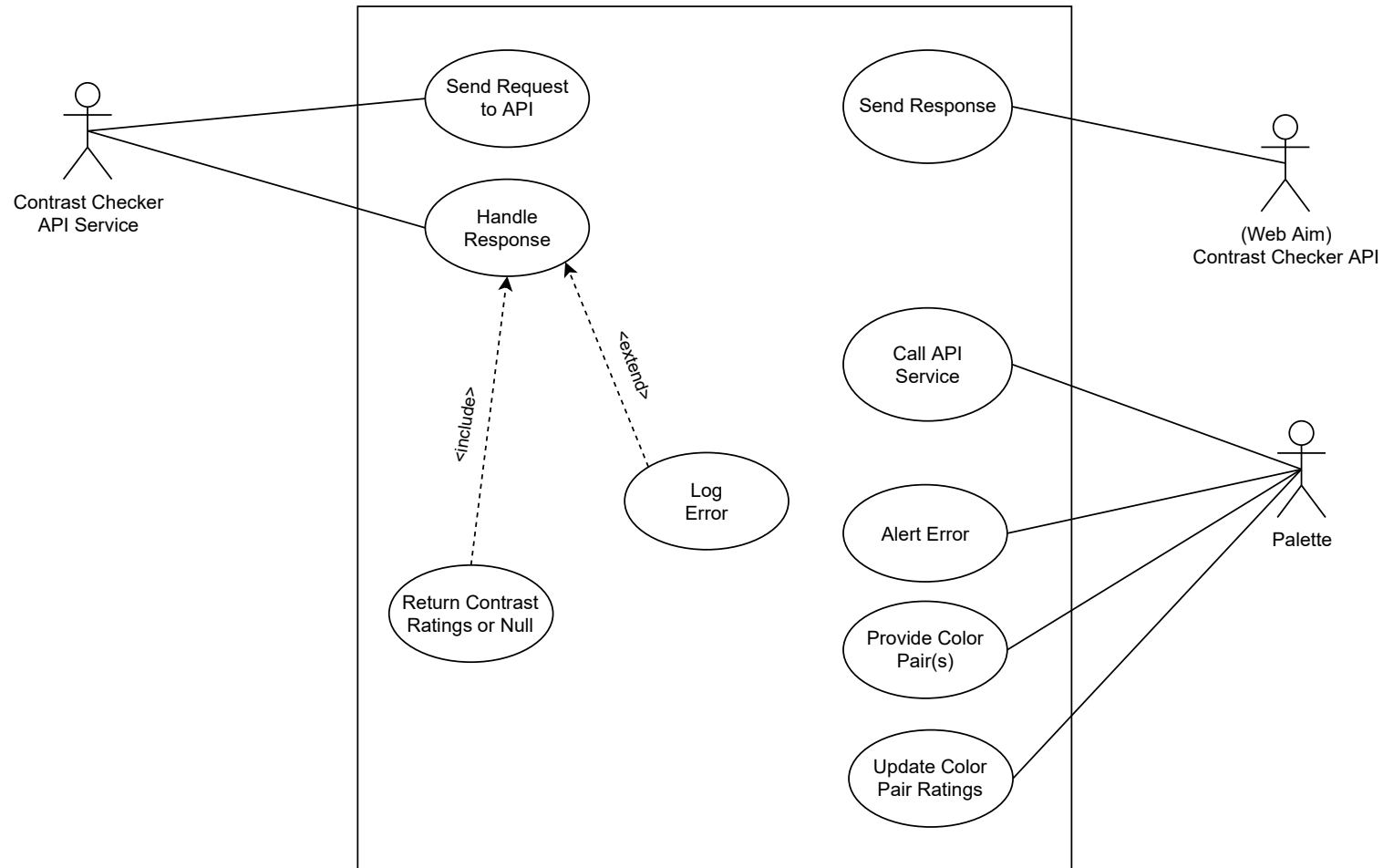- Return (New) Palette — <include>
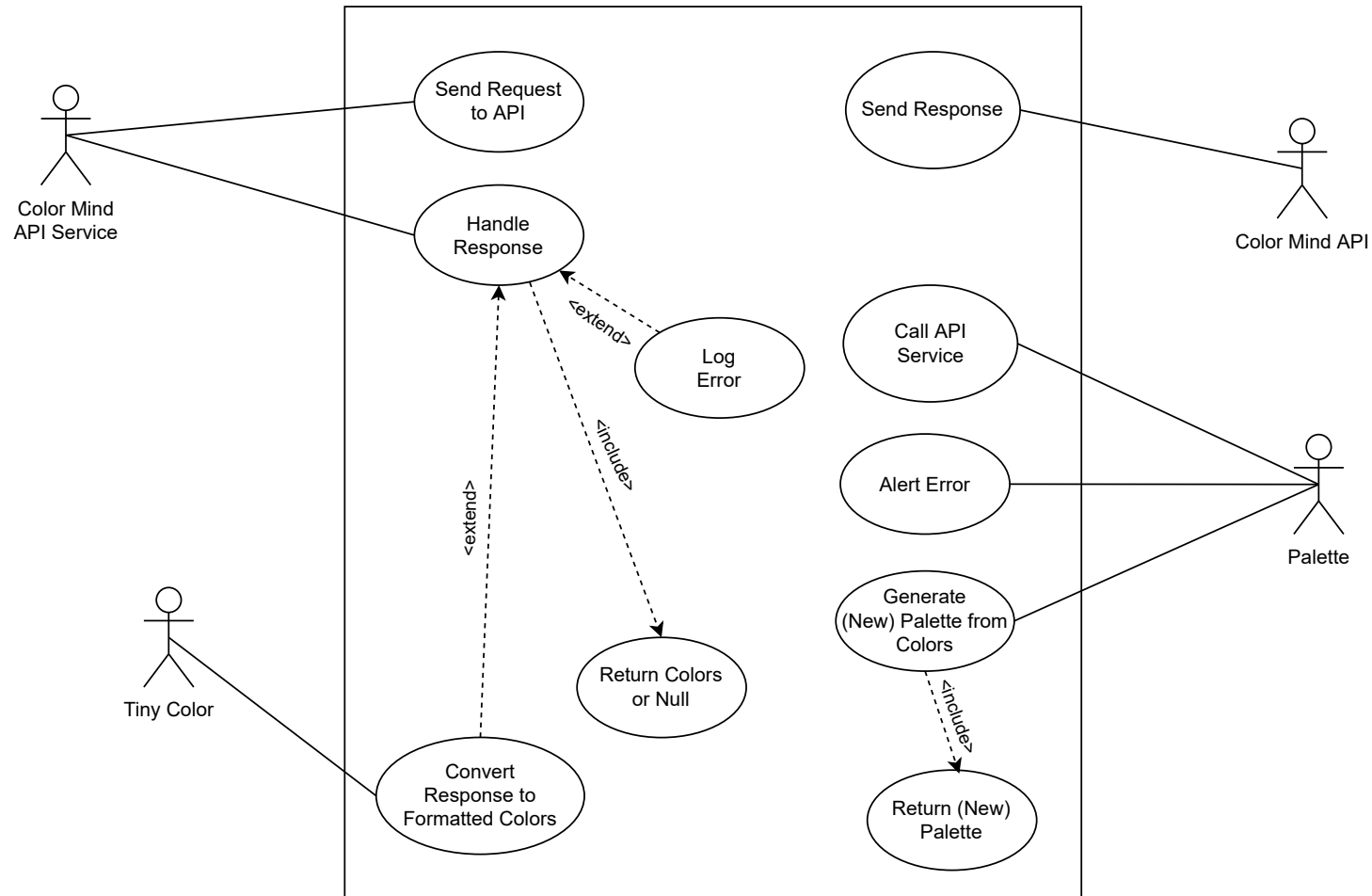
Use Case Diagram

Contrast Checker API Service

UC-8

Use Case Diagram

Control Panel Display

UC-9

Use Case Diagram

Contrast Checker Page

UC-10

Context

Palette

Page

Provide Palette State

Provide Color Pairs

Map Cards from Color Pairs

Display HTML Elements

Assign Color Pairs to Prop

Set Elements Styles with Color Pairs

Set Element Texts with Color Pairs

<include>

Display Component

Contrast Rating Card Component
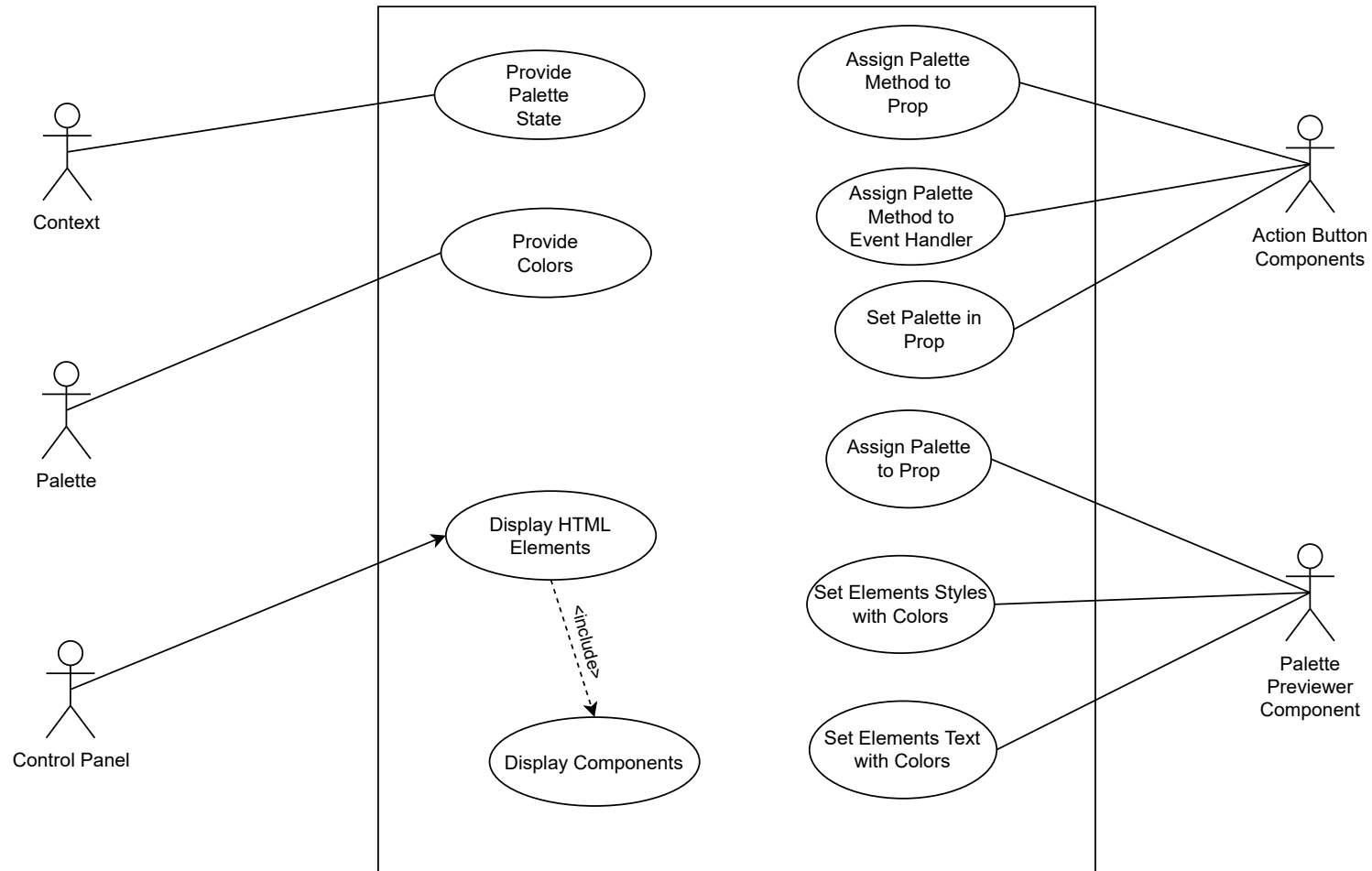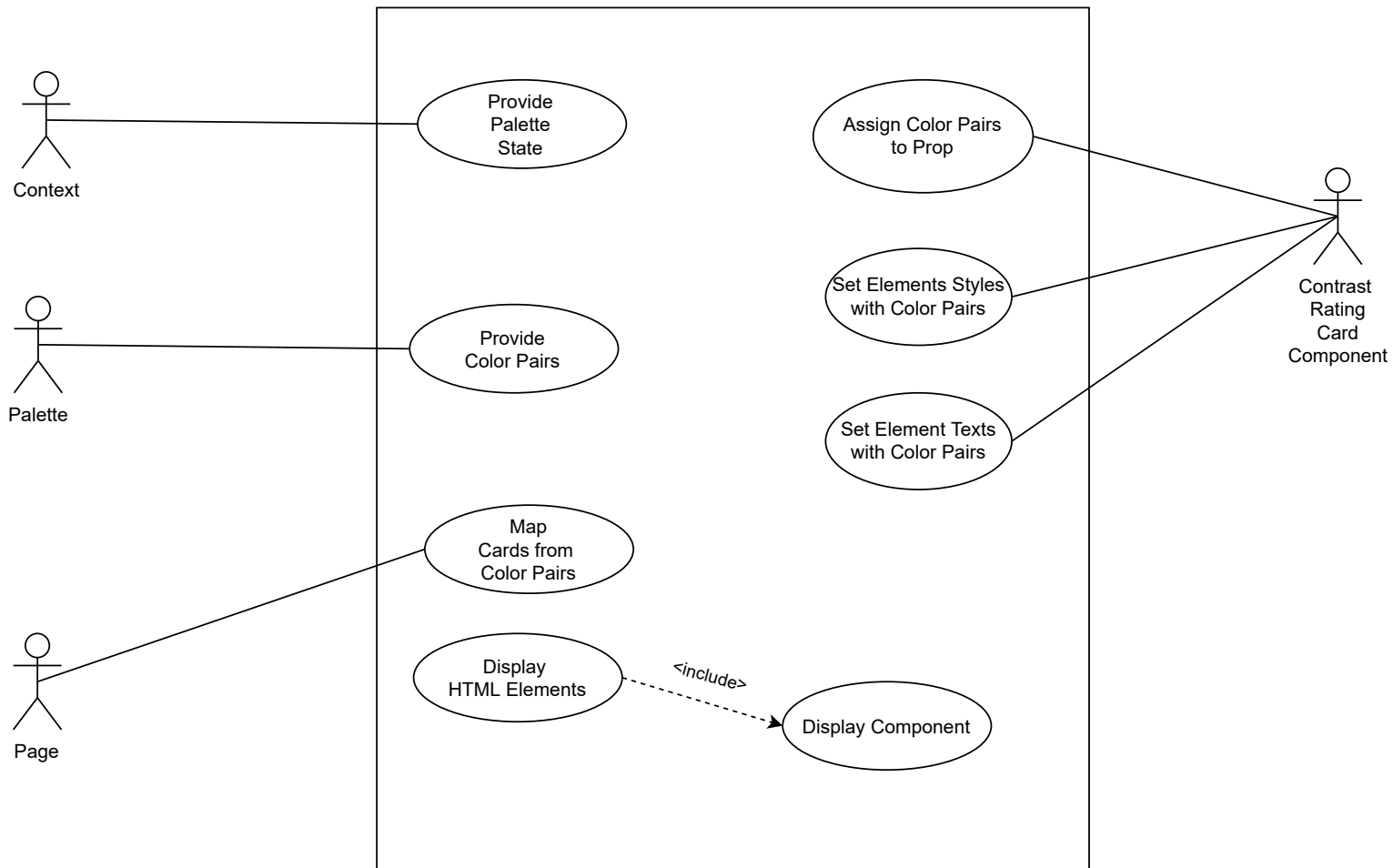
Use Case Diagram

Mock Site Page

UC-11

Set Styles
with Colors

HTML
Elements

Provide
Palette
State

Context

Diplay
HTML Elements

Page

Provide
Colors

Palette