Prerequisite
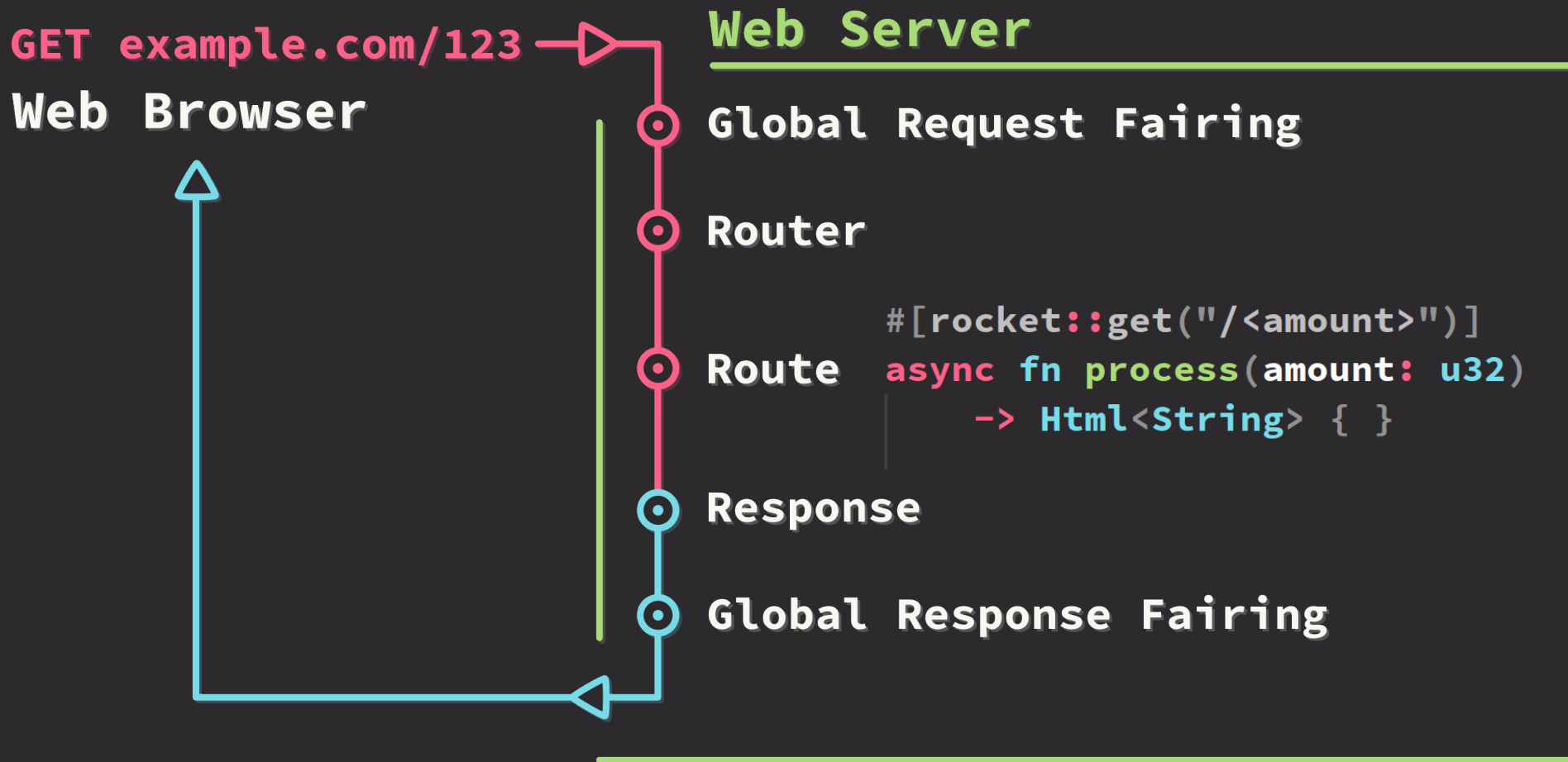Rocket

About Rocket

- Asynchronous web server
  - Cookies, forms, encryption
  - Query strings, comprehensive URI routing, redirects, etc
  - State management
  - Global request/response inspection
  - Built-in testing mechanism
- **https://rocket.rs**

Rocket Web Request Lifecycle

GET example.com/123

Web Browser

Web Server

Global Request Fairing

Router

Route

```
#[rocket::get("/<amount>")]
async fn process(amount: u32)
    -> Html<String> { }
```

Response

Global Response Fairing

Concepts

- **Request** – Incoming data from client
- **Response** – Outgoing data from server
- **Request Guard** (function parameter)
  - Prevent routes from running without proper data
- **Catcher** – Responds to unhandled errors
- **State** – Data managed by Rocket
  - Can be accessed via route guard
- **Fairing** – Global request & response inspection