# Building Static Sites with Hugo and GitHub

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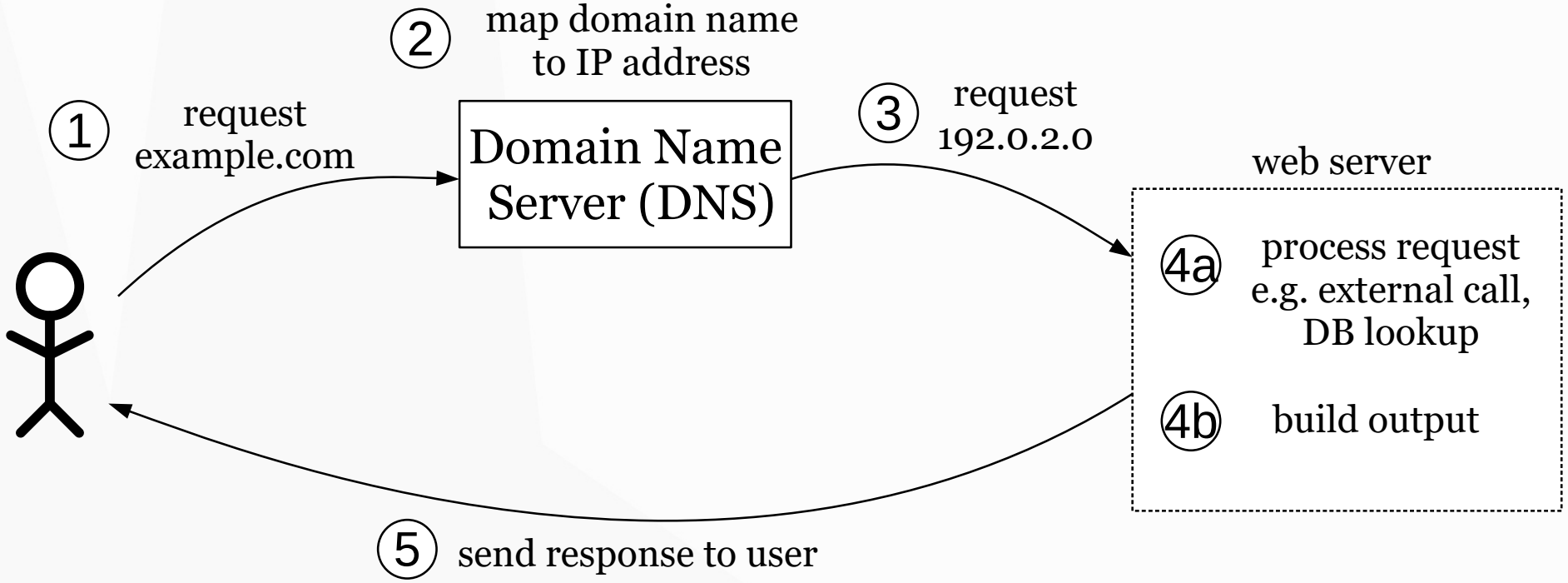
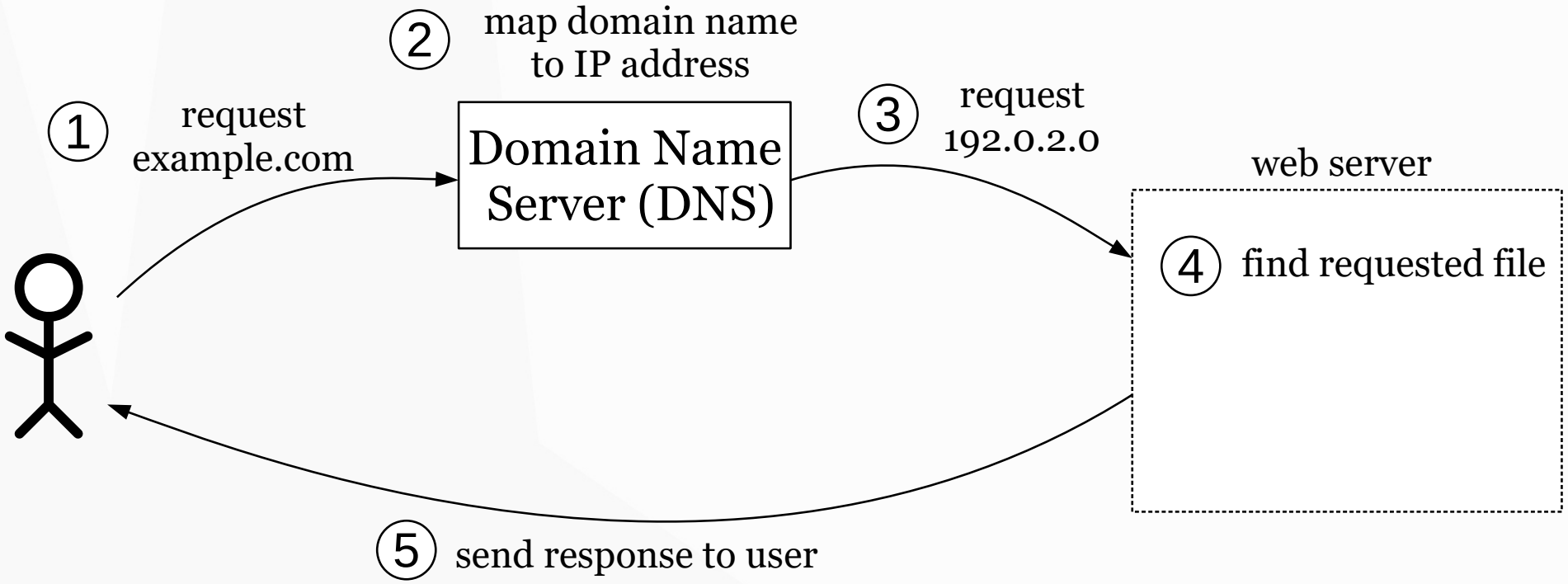
# Agenda

1) What are static websites?
2) How to make static sites using Hugo?
3) How to host static sites using GitHub?

# Typical (aka dynamic) site workflow



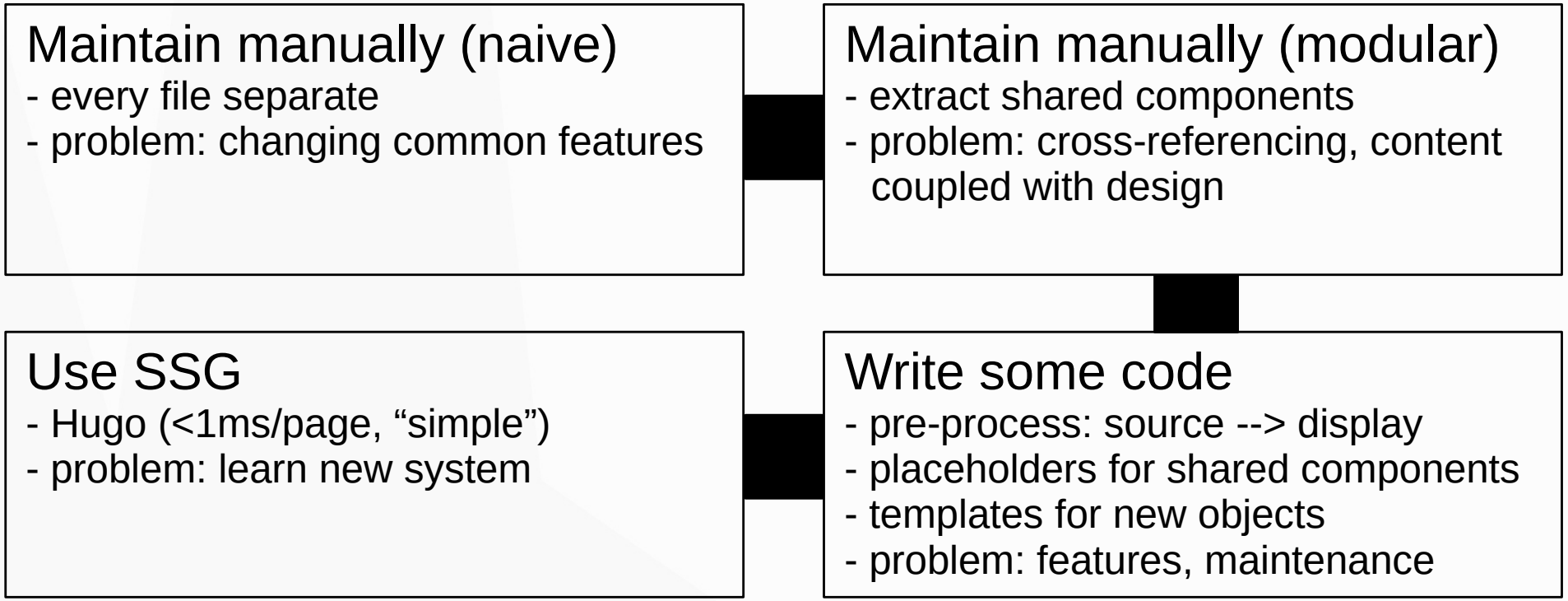
# Static site workflow



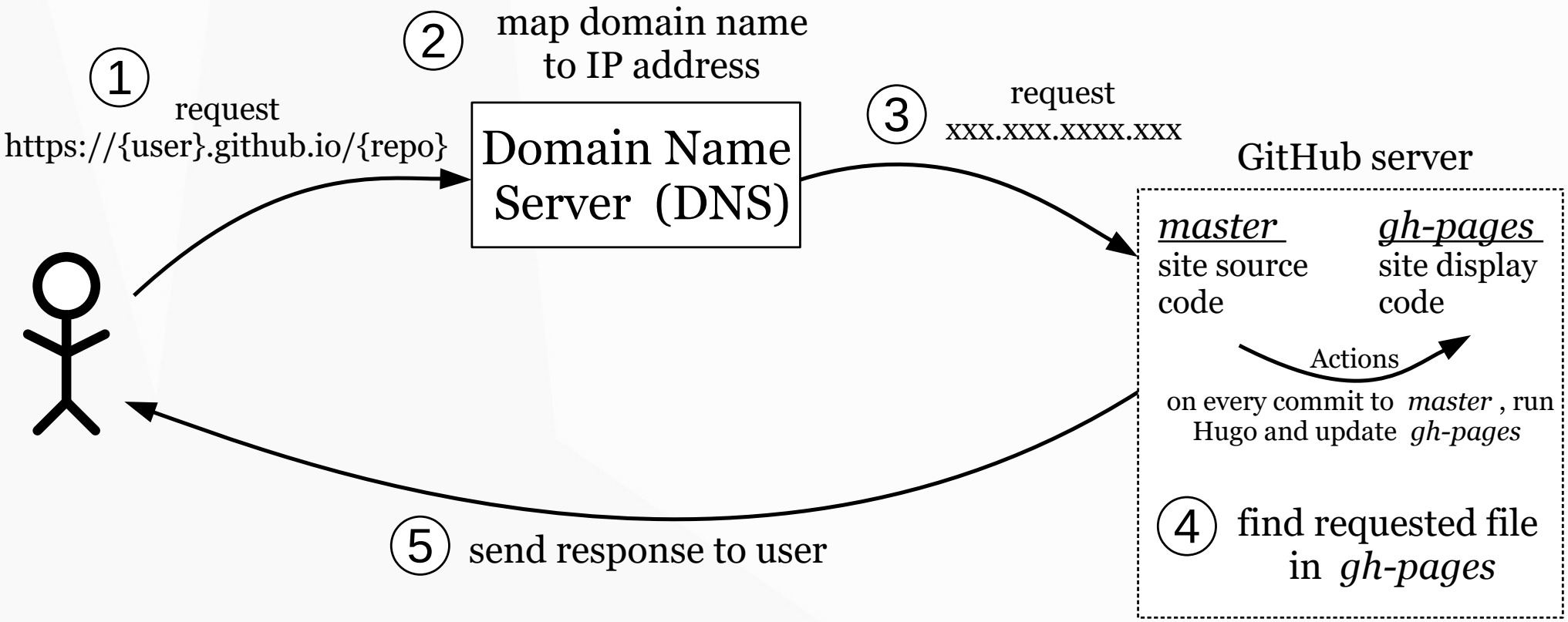
# Pros & Cons of Static Sites

| | Dynamic | Static |
|---|---|---|
| Pros | Support arbitrary complexity<br>Standard configuration | Simpler setup and configuration<br>Faster response time<br>Cheaper/free hosting |
| Cons | More complexity (failure modes)<br>More expensive hosting | Can't serve dynamic content<br>Immature tooling<br>Requires technical expertise |
| Good use cases | Social interaction<br>(e.g. forums, profiles, messaging)<br>Client-server interaction<br>(e.g. Google Maps) | Personal blog/portfolio<br>Company/product website<br>Documentation |

# Evolution towards Static Site Generators (SSG)



# Static Site workflow with GitHub



# Demo time

1) Clone and configure starting repo
   - https://github.com/charlesjlee/hugo-github-pages-actions-demo
2) Create more posts
3) Switch themes
4) Override template

# More Hugo features

- Dynamic-like content
  - Calls to 3rd party services, e.g. ecommerce, disqus
  - Client-side Javascript, e.g. search
  - Data-driven content via getJSON, getCSV

```
<ul>
  {{ $urlPre := "https://api.github.com" }}
  {{ $gistJ := getJSON $urlPre "/users/GITHUB_USERNAME/gists" }}
  {{ range first 5 $gistJ }}
    {{ if .public }}
      <li><a href="{{ .html_url }}" target="_blank">{{ .description }}</a></li>
    {{ end }}
  {{ end }}
</ul>
```

- Internationalization and localization (i18n) support
- Combine and layer themes via components