

## v3.0.0 Design

- The URL will be parsed and the path will be stripped of before appending absolute favicon paths ‘/’ (1).
- ‘styles.css’ will be updated so the page background matches the favicon background and all text matches the favicon foreground (2).
- All elements will be wrapped in a ‘main’ tag which will be centered using flexbox (6).
- A tested package called `cache` will be added (3, 4).
- Specific getters wrapping `cache.Getter` will be provided for each of favicons, the config, and the template.
  - A `cache.Cache` decorated with `cache.ThreadSafeDecorator`, `cache.LogDecorator`, and `cache.TimeDecorator` will be accessed by the getter for favicons.
  - A `cache.Cache` decorated with `cache.ThreadSafeDecorator`, `cache.LogDecorator`, and `cache.ModifiedDecorator` will be accessed by the getter for websites from the config (3).
  - A `cache.Cache` decorated with `cache.ThreadSafeDecorator`, `cache.LogDecorator`, and `cache.ModifiedDecorator` will be accessed by the getter for the template (4).
- Caches will be injected into the main `http.HandlerFunc` through a closure (3, 4).
- Wrap the favicon in the template with an if that only adds the favicon if it isn’t empty (7).

### cache

## v2.1.0 Design

- A copy assets shell script will copy ‘static’ and ‘tmpl’ to a passed remote address, user, and directory (1).

## v2.0.0 Design

- The favicon will be 1 black wire going into a hub with 3 wires leaving (1).
- The header will be larger bold text that says ‘hub’ (2).
- Styles will be refactored from the template into ‘static/styles.css’ and be as general as possible (3, 5).
- The template will be moved into a file called ‘tmpl/index.html’. It will be cached using a cache like in ‘Cache’. A separate process will clear the cache every day (4, 6).
- `http.FileServer` will be used to serve static files (7).

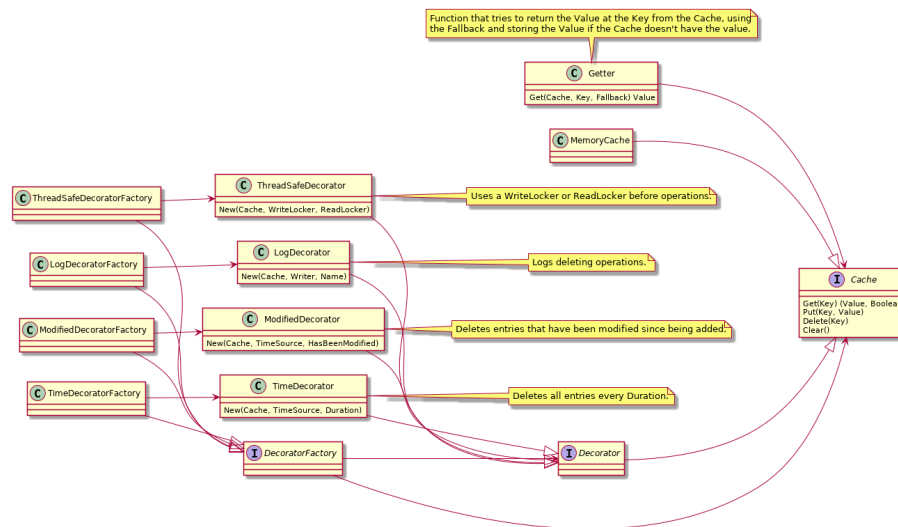


Figure 1: cache Design

- A cache like in 'Cache' will be checked by the main handler before querying a favicon and updated after querying a favicon. A separate process will clear the cache every day (8).

## Cache

```

type Cache struct:
* Get(URL) (FaviconPath, bool)
* Put(URL, FaviconPath)
* Clear()

```

## v1.1.0 Design

- A LoadFavicon function will accept a Website, make a request to the URL, and parse an image URL at a tag with rel="icon" if it exists into the Website. This will be called for each Website in Handler. The image will be injected to the right of each website link (1).
- A shell copy config script will use scp to copy the config file to a passed remote host, user, and directory (2).
- A shell deploy script will use ssh to log into a passed remote host and user and start hub with nohup in a passed working directory (3).

## v1.0.0 Design

- A `go` command with no arguments will serve a single home page with its template embedded in the binary.
  - `go get` will install the command (5).
  - The command will then be able to be immediately run with no arguments (4).
- For each request, the server opens a config file located at a fixed location, reads the directory from it, injects the directory into the embedded template, and serves the HTML page (1, 4).
  - The config file will be a YAML file with the structure in ‘Config’ (3).
  - The directory will be injected into a list which shows each websites name with a link to the website (2).

### Config

- URL: <URL>  
  name: <NAME>
- ...