



# backlog4.me

A Personal To Do Application



# Overview

Based on Todoist

About a month to build

Website and Admin Site

Offline synchronization

Secure Logon

Comprehensive Build System

- Javascript
- AngularJS
- Bootstrap
- Bootswatch
- Gulp
- Bower
- npm
- Express
- Mono
- C#
- ServiceStack
- MongoDB
- redis
- nginx



# Overview

DEMO



# Directory Structure

Website

- app/
- bower.json
- bower\_components/
- build/
- gulpfile.js
- node\_modules/
- package.json
- ...



# Package Managers

NuGet

C#/Xamarin

NPM

Node.js Based Tools

Bower

AngularJS, CSS, etc..



# Gulp

```
5 var gulp = require('gulp'),  
6   argv = require('yargs').argv,  
7   less = require('gulp-less'),  
8   tinylr = require('tiny-lr'),  
9   express = require('express'),  
10  path = require('path'),  
11  mainBowerFiles = require('main-bower-files'),  
12  del = require('del'),  
13  rename = require('gulp-rename'),  
14  markdown = require('gulp-markdown'),  
15  spawn = require('gulp-spawn'),  
16  debug = require('gulp-debug'),  
17  concat = require('gulp-concat'),  
18  sourceMaps = require('gulp-sourcemaps'),  
19  uglify = require('gulp-uglify'),  
20  ngAnnotate = require('gulp-ng-annotate'),  
21  gulpIf = require('gulp-if'),  
22  preprocess = require('gulp-preprocess');
```



# Authentication

Uses OAuth-like approach

Missing nonce's

Uses JWT's

Authorization Bearer

authService.js

authInterceptor.js

DEMO



# Angular Modules

Don't put modules in variables to save typing!

Do this to define...

```
angular.module('app.services')  
  .factory('authInterceptor', function ($rootScope, $q, $window, apiUrl) {  
    return ...  
  })
```

Then this to instantiate...

```
angular.module('app.services', ['app.constants'])  
  .config(function($httpProvider) {
```







# Canvas Based Chart



DEMO



# CSS Animations

```
.still-stack {  
  width: 80px;  
  height: 80px;  
  background: url('images/stacks.png') left center;  
  background-position: 0px;  
  display: inline-block;  
}  
  
.refresh-stack {  
  width: 80px;  
  height: 80px;  
  background: url('images/stacks.png') left center;  
  animation: refresh-play 1.6s steps(16) infinite alternate;  
  display: inline-block;  
}  
  
@keyframes refresh-play {  
  100% { background-position: -1280px; }  
}
```



# Deployment

nginx

Simpler to configure than Apache?

Hetzner vs. AWS

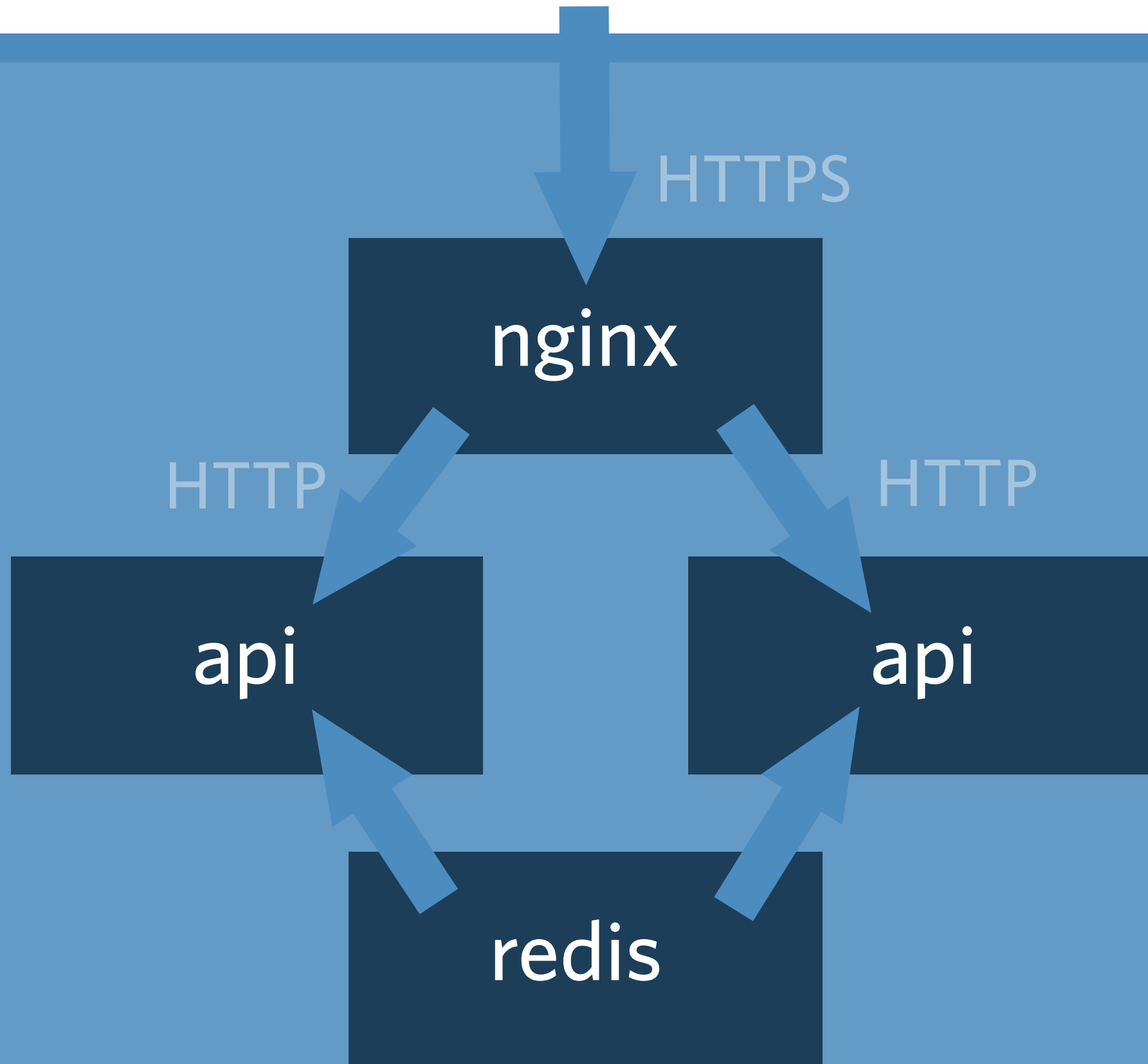
€30 + \$12 (~\$65) vs. \$\$ hundreds  
8 core, 2TB storage

HTTPS

Namecheap



# Load Balancing And Caching





# To Do

Fix bugs!

Add tests!

Break out authentication

Bower components

Rewrite REST API

Node.js & Loopback



# Other Projects

## Where2

An app for figuring out where to meet people

## Soapbox

A customizable blogging engine