## Tuesday: 404 Pages

## 404 Pages

We have all experienced times when we are web browsing and the browser responds with a 404 error of not finding the resource we are looking for which looks similar to this:



This is google's 404 page and different applications have their own customized 404 pages. It's very informative to a user as opposed to having a blank page. As much as it might be disappointing to the user, it improves the user experience. In severe cases, it keeps our application from breaking when a user requests for a resource that is generated by the app but isn't present and the occurrence of that error isn't mitigated by the app. Let's create a component for error pages in our application with this command on our terminal:

```
$ ng generate component not-found
```

In the template file of this component, let's include this code:

src/app/not-found/not-found.component.html

```
<div class="alert alert-danger" role="alert">
  <h1 class="text-center"><b>Sorry, we couldn't find what you're looking for</b></h1>
  <hr>
  Please check your URL!
</div>
```

We have used a bootstrap alert component in the template file. We now need to inform our router to direct users to this component if they look for a resource that isn't found in the app.

src/app/app-routing.module.ts

```
import { NotFoundComponent } from './not-found/not-found.component';

const routes: Routes = [
    { path: 'goals', component: GoalComponent},
    { path: 'about', component: AboutComponent},
    { path:'**', component:NotFoundComponent},
};

...
```

At the top, we have imported our NotFoundComponent. We have then defined a route whose path has wildcards and directed this path to the NotFoundComponent. The wildcards define a route that is not present in our routes array. So in the case a user tries to look up a route that does not exist in the routes of our app, they will be taken to the not-found component. Let's fire up our servers and try requesting a route in the address bar that doesn't exist in our app to see our apps error page working.

## Redirect

None of our routes caters for an empty path in our app. This is why when we load the path <a href="http://localhost:4200">http://localhost:4200</a>), only the navbar shows on our app. We can implement a redirect in our app so that when a user loads an empty path, they don't have an empty screen but instead see the goals. Let's configure a route for empty paths.

src/app/app-routing.module.ts

```
import { NotFoundComponent } from './not-found/not-found.component';

const routes: Routes = [
    { path: 'goals', component: GoalComponent},
    { path: 'about', component: AboutComponent},
    { path: '**', component: NotFoundComponent},

    { path: '', redirectTo:"/goals", pathMatch:"full"},
];
...
```

We have created an empty path with the redirectTo property that points to the path of the GoalComponent. A redirect requires the pathMatch property which tells the router how to match the URL to with the path given. In our case, the router will only redirect to the /goals path if the URL given is empty ''. If our server is still running and we load our application, we are redirected to the GoalComponent instantly.