Search Interface Implementation for a Learning Management System

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swissteach

Overview

- > Swissteach
  - > LMS Global Teach
- > Motivation
- > Technologies
  - > Search Engine
- > Research for Interface
- > Prototypes Interface
- > Demo
- > Next Steps

- Employee since November 2016
    - Customer Care
    - Software Engineer after achieving Bachelor's degree
- One Product: LMS (Learning Management System) Global Teach
- Microsoft Partner

Search at LMS Global Teach

> Learning Content published in catalog

>> Courses

>> Documents

>> Training Plans

>> …

> Catalog search for Student

>> Full Text Search

>> Filter Search

Existing Global Teach Search

> Example from Customer: Swiss Government

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

> Why isn't your search more like Google search?

- Frontend
  - React
  - Typescript
- Backend
  - .NET Core
  - C#
- Search Engine: Azure Cognitive Search
- CICD
  - Azure DevOps
  - Azure Web App

Microsoft Azure Cognitive Search

›   Cloud search as a service

›   Extract information from content

›   Create Index

›   Use API to search

›   Useful features

  ›   Autocomplete

  ›   Skills – Extract key phrases, translate

  ›   Filtering

  ›   Fuzzy search

  ›   Scoring

Azure Search API Example

> Send Post Request to Backend with parameters:

```
▼ {search: "swiss~0^1", maxResults: 5, queryType: 1}
    maxResults: 5
    queryType: 1
    search: "swiss~0^1"
```

> Backend adds Highlights -> API Search

> Results with:
> $top=2&highlight=keyphrases&search=swiss

› Google Trends:

  › People ask more personal questions

  › Expecting better results with less effort

  › Expecting tailored experience

› Dealing with failure

  › to take control will help to overcome failure

best haircut
for me

what should I
get for lunch

how often should
I wash my hair

Prototype (Interface) One

› People asking for a Google search? – I'll give them a Google search!

› Prototype One with "Failure Control"

› Give user possibility to understand the search and change it

  › User wont have to change the search input

  › Impact search results live

  › Give user impression to be in control

Next Steps

> Evaluate which interface is better

>> Testing both interfaces with two different customers

> Indexing content from the customer

> Improving searches – one final search