Search Interface Implementation for a Learning Management System

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Overview

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❯ LMS Global Teach
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❯ Technologies
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❯ Prototypes Interface
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Swissteach

- 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
Motivation

Why isn’t your search more like Google search?
Technologies

❯ 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

Microsoft Azure Cognitive Search

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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
Research for Interface

❯ 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
Prototype (Interface) One

People asking for a Google search? – I’ll give them a Google search!
Prototype (Interface) Two

➤ Prototype One with “Failure Control”
➤ Give user possibility to understand the search and change it
  ➤ User won’t 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