SEARCH INTERFACE IMPLEMENTATION FOR A LEARNING MANAGEMENT SYSTEM
OVERVIEW

1. Recap
2. Chosen Approach
3. Technical Details
4. Prototypes
5. Testing
6. Conclusion & Future Work
RECAP

Swissteach

Global Teach (LMS)

Learning Content Search:

Catalog search

map

Start search

Search options

Simple search

| @ Swiss Map Trophy motorisiert / TEST |
| Research --> Guest --> Learning program --> Map Teaching - Military Topography |
| Rating | ⭐⭐⭐⭐⭐ |

| @ Swiss Map Trophy Muskelkraft / TEST |
| Research --> Guest --> Learning program --> Map Teaching - Military Topography |
| Rating | ⭐⭐⭐⭐⭐ |

Displaying page 1 of 1, items 1 to 2 of 2.
1. Research about User Search Behavior
2. Implement two Prototypes
3. Test Prototypes with Customers Eagle and Purple Berry (Customer Data)
4. Improve Prototypes
5. Last Test to choose final Prototype
TECHNICAL DETAILS

Used Technologies

- Back-end: .NET Core with C#
- Front-end: React with Typescript
- Search Engine: Azure Search

System Structure

![Diagram showing Azure Search Service and various components related to search functionality.](attachment:image.png)
Simple, mimicking Google Search
PROTOTYPE TWO

Personalizable, influence Search Parameter and Settings

Search for: Horse, Microsoft, airplane, swiss, bunny or whatever floats your mind!

No results
TESTING PROTOTYPES

2 Prototypes
2 Customers
3 Tests (per Customer)
USER TEST ONE & TWO

Tasks and related Questions

Results User Test One:

P1: 17%  
P2: 83%

Results User Test Two:

P1: 33%  
P2: 67%
PREPARATION FOR FINAL TEST

1/3 of Tester preferred Prototype One

New Approach: Combine both Prototypes
USER TEST THREE

Combined Features of both customers

No answer: 12%

P2: 88%
CONCLUSION & FUTURE WORK

Final Prototype is useful: Example blur a Word

Interviews instead of User Tests: Quality of Answers

Work into new Technologies properly

Further Action needed
• Usability Test
• Tool for automated indexing of learning content
• Integrate Search in LMS

Company Swissteach is happy with the Result!