Tourism Destination Websites

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Course: CS 4624 Multimedia/Hypertext/Information Access, Dr. Edward A. Fox
Virginia Tech, Blacksburg VA 24061, 5/01/2019
Outline

I. Project Background
II. Initial Implementation
III. Setbacks and Project Review
IV. Project after Review
V. Lessons Learned
VI. Future Work
Background
Overview

Goal:
Provide decision makers at tourism destinations with information about past trends to potentially determine the future direction of destination online marketing.

Given:
List of DMO websites from each state and Washington DC

Deliver:
A matrix for each month dating back to 1996 for cross-referencing DMO websites that month and their outbound links
A dictionary structure with historical structural data on the DMO websites dating back to 1996
It seems wherever you turn in this town, there's a great college. Or at least a college student.

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Initial Implementation
Initial Implementation

Understanding the Development of US Tourism Websites
Tech Stack

- Microsoft Azure
- node.js
- MongoDB
- Python
- TypeScript
- React
- GraphQL
Setbacks and Project Review

1. Desired product too expensive
2. Scope of project too large for one semester of work

1. Abandon website
2. Downsize scope of data to manageable size
3. Visualizations are stretch goals, no longer requirements
Project After Review

Matrices:
A matrix for each month dating back to 1996 for cross-referencing DMO websites that month and their outbound links

Dictionary:
A dictionary structure with historical structural data on the DMO websites dating back to 1996
Matrices

Snapshot → Intermediate Text File → CSV File → Client Software
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Dictionary

- Websites
  - Year
    - Month
  - State
    - Domain
      - Internal Links
      - External Links
      - Meta Tags
      - Text
      - Number of Images
Lessons Learned

● Don’t underestimate the learning curve of certain technologies
● Discover the exact format your data will be as early as possible
● When dealing with external organizations, take a lot of care
Future Work

- Deploy website
- Create visualizations of the data
- Collect additional data
- Further refine parsing
Acknowledgements

Florian Zach, PhD, <florian@vt.edu>, Assistant Professor, Howard Feiertag Department of Hospitality and Tourism Management, Pamplin College of Business, Virginia Tech, Wallace Hall 362, Blacksburg VA 24061 USA

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Questions?