Memorial Living Bridge

Department of Information Technology, University of New Hampshire

Introduction

This Memorial Living Bridge project is an interdisciplinary collaboration between a Civil Engineering (CE) team and an Information Technology (IT) team, aiming to create an interactive, "living museum" for visitors and those interested in learning more about the Portsmouth Memorial Bridge.

Objectives



The start of the project entailed the migration of the existing Memorail Bridge Wordpress site onto a locally hosted UNH WAMP server. Items were then integrated onto the current site including a live Instagram feed using Snapwidget and an interactive 3D model using SketchFab. Additionally, subpages were incorporated onto the site to elaborate on individual model points and QR codes were created to be placed on the bridge, linking back to pages on the site. Finally, a plan for scraping data was researched for future integration of sensors developed by the CE team.

HOME

INTERACTIVE BRIDGE MODEL

TRAFFIC INFORMATION

INFORMATION CENTER

Advisory Committee

Photo Gallery

News

Design & Construction

Connecting Generations & BRIDGING COMMUNITIES

Media Coverage

Contact

Events & Announcements

WEATHER SENSOR



Weather sensors will be developed for a more accurate reading of current conditions; currently the closest Weather station that Portsmouth uses is in Durham.



- (B) 3D Bridge Model (SketchFab)
- (C) Subpages
- (D) QR Codes
- (E) Database





QR Code on Bridge



Faculty Advisors: Dr. Erin Bell and Dr. Tat Fu



Instagram Feed



Sensor Database

- Sensor Information

- +Weather/Seismic Activity

-Place on bridge to be scanned by visitors

Implement QR Codes

-Link to points on 3D model relative to placement on bridge **Display sensor information on website**

-Add points on 3D model for future sensors placed on bridge -Create database to hold sensor information

-Grab data from database to add to sensor point descriptions

-Upgrade account to allow admin to choose photos to display on site

Change Instagram account to restrict photos which can display on site **Create subnavigation pages for 3D model point descriptions**

-Describe points on model more in depth on separate pages -Link QR codes to these pages

Nen Hampshire RESEARCH



Chris Sedgley, Ryan McAvoy, Elisha Emond, Tyler Watts

Weather

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livingbridge.sr.unh.edu/?p=2520

Future Work

The authors gratefully acknowledge the partial support given by the National Science Foundation through Grant 13-42020. Any opinions, findings, and conclusions or recommendations expressed herein are those of the authors and do not necessarily reflect the views of the National Science Foundation.