



Field Studies - Final Presentation

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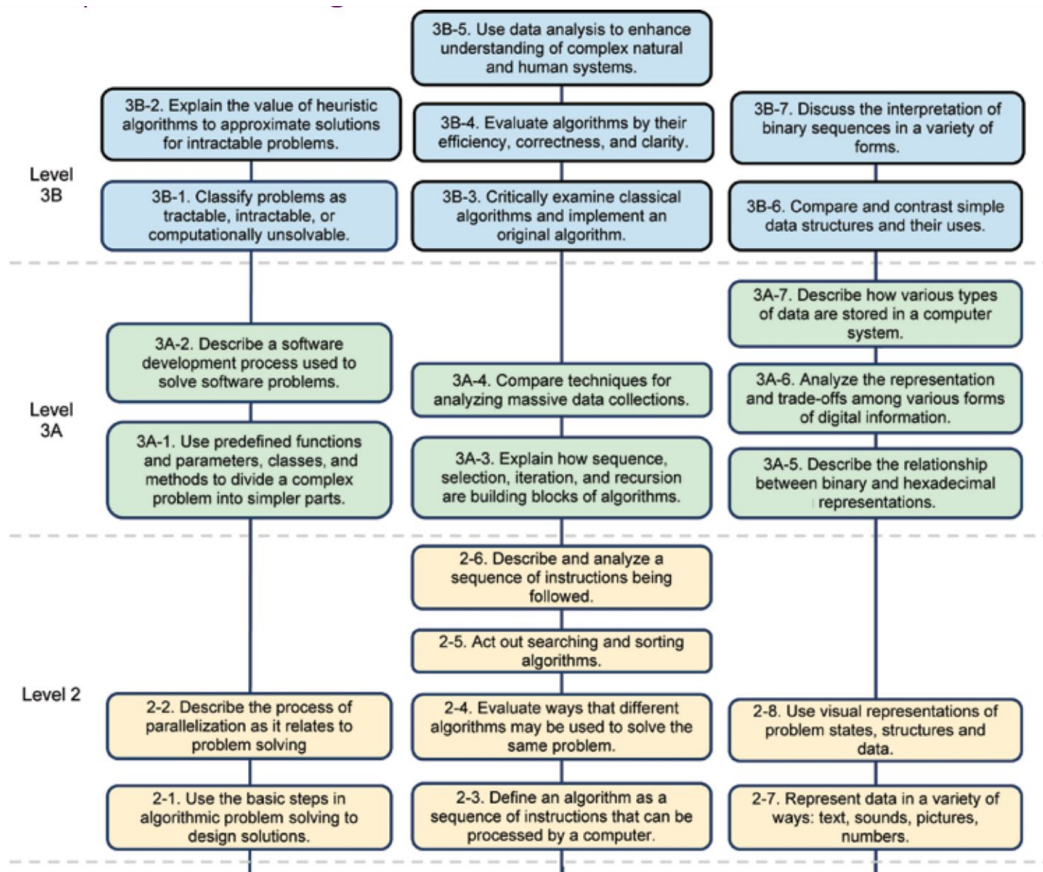


Introduction

- Bring SAGE into the classroom
- Assess pre-existing curricula
- Integrate Parson's Puzzles
- Analyze and implement suggestions

Curricula Analysis

- Compilation of CT standards
- Examination of similar websites
 - Gameful
 - Codecademy
 - Code.org
 - CodeAvengers
 - Interactive
 - Udacity
 - KhanAcademy
 - Code School



IRB

Human Subjects Research

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IRB-AAAR7711
Status: Approved

Attachments

HIPAA Forms

Protocol Actions

Copy Protocol

File New Protocol-Specific
COI

Protocol View

Print Menu

View Datasheet

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Add Correspondence

View Correspondence

Human Subjects

Protocol Overview

Abbreviated title	SAGE I Feasibility Study	Protocol Number	AAAR7711
Originating Department	ENG Computer Science (521300X)	Protocol Initiator	Jeffrey Bender (jrb2211)
Protocol Year	1 Modification 00	Date Created	02/11/2018 10:12:17
Principal Investigator	Gail Kaiser (gek1)	You are	Lalitha Madduri (lm3302)

Attach Documents

Help

► Click here to add attachment

View Document	File Name	Document Type	Date Attached	Attached I
Email Content	feasibility_recruitment_email.pdf	Recruitment Material	04/14/2018	Jeffrey Bender
SAGE Primer for Recruitment (revised)	sage__primer.pdf	Recruitment Material	04/14/2018	Jeffrey Bender
SAGE Primer for Recruitment	sage_primer.pdf	Recruitment Material	04/07/2018	Jeffrey Bender
Semi-structured Interview Protocol Questions	Semi-structured Interview Protocol Questions.pdf	Study Material/Instrument	03/22/2018	Lalitha Madduri
Teacher Survey	Teaching and Learning with Scratch - Google Forms.pdf	Study Material/Instrument	03/14/2018	Jeffrey Bender

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QUESTIONS

RESPONSES

17

Section 1 of 6



Teaching and Learning with Scratch

This 5-10 minute survey aims to surface opportunities for improving teaching and learning with Scratch, with a focus on grade 6-8 students. The responses will be reported in an aggregated and anonymized manner regardless of whether identifying information is provided. If you would like to receive a copy of the report when it is published, please provide your email address. Thank you for your assistance with this study. More information on Scratch is available here: <https://scratch.mit.edu/>.

Email address *

Valid email address

This form is collecting email addresses. [Change settings](#)



UCD and Semi-Structured Interview Protocol



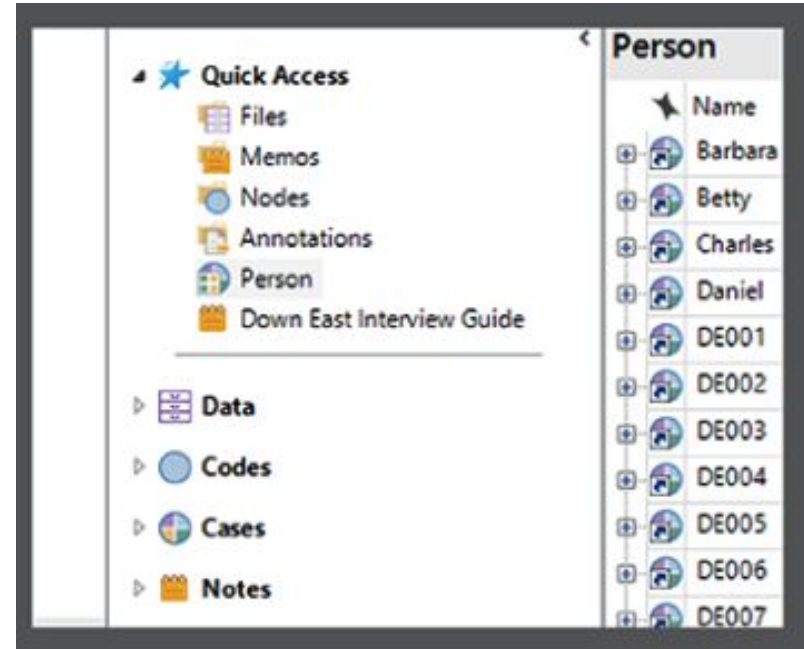


Parson's Puzzle Library

<https://scratch.mit.edu/studios/4945809/>

Interview & UCD Analysis

- Tools and Systems for interview transcription:
 - NVivo
 - CMU Sphinx
- Some results:
 - Identify qualities and themes to investigate for analysis
 - Coding interview responses



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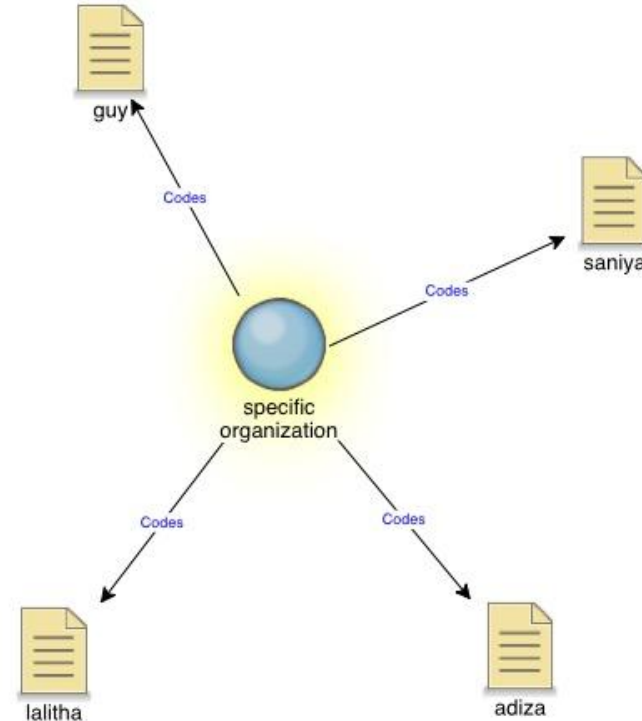
Speech to Text

Easily convert audio and voice into written text understanding of content.



Qualitatively Assessed and categorized Semi Structured Interview Responses & Tangential Feedback

Files\guy 1 reference coded, 0.24% coverage
Reference 1: 0.24% coverage : Six to eight at night Johns Hopkins position.
Files\lalitha 1 reference coded, 2.57% coverage
Reference 1: 2.57% coverage I teach through code her and take it all and we teach a different venues taken out how standards in terms of the curriculum that we want to follow so the Baltimore city school curriculum that we want to make sure the students are learning.
Files\saniya 3 references coded, 2.72% coverage
Reference 1: 0.03% coverage Yes
Reference 2: 1.27% coverage Is on that all schools I go start with block based programming and then the transition into type based. Speaker 2: All schools have to cover web development in one way or another.
Reference 3: 1.42% coverage The programming languages that they teach to the students entrance and strings so whatever up in the final product or whatever they end up teaching has to be directly linked to what the kids want to do



Curricula UI Implementation

- Adapting Gavi's wireframes to code

The screenshot shows the Gavi Rawson interface with a modal titled "Fill in Title and Select the Focus". The modal has a "Title" input field and three columns of options: Sequences, Conditionals, and Loops. Each column has checkboxes for "Problem Statements" and "Instructions". The "Next" button is at the bottom.

Sequences	Conditionals	Loops
<input checked="" type="checkbox"/> Problem Statements	<input checked="" type="checkbox"/> Problem Statements	<input checked="" type="checkbox"/> Problem Statements
<input type="checkbox"/> Instructions	<input type="checkbox"/> Instructions	<input type="checkbox"/> Instructions
<input checked="" type="checkbox"/> Problem Statements	<input checked="" type="checkbox"/> Problem Statements	<input checked="" type="checkbox"/> Problem Statements
<input type="checkbox"/> Instructions	<input type="checkbox"/> Instructions	<input type="checkbox"/> Instructions

The screenshot shows the SAGE "Create Mission" form. It includes fields for "Mission Name", "Mission Description", and "Backstory for the Mission". Below these fields is a section titled "Please select the Focus of this mission from below" with three columns: Sequences, Conditionals, and Loops. Each column has a list of options with checkboxes. The "Reset", "Save", and "Add New Focus" buttons are at the bottom.

Sequences	Conditionals	Loops
<input checked="" type="checkbox"/> Problem Statements	<input checked="" type="checkbox"/> Dynamic Sequences	<input checked="" type="checkbox"/> Samples Instances
<input type="checkbox"/> Instructions	<input type="checkbox"/> Boolean Logic	<input type="checkbox"/> Repeating Sequences
<input type="checkbox"/> Recipe	<input type="checkbox"/> If	<input type="checkbox"/> Looping Forever
<input type="checkbox"/> Algorithms	<input type="checkbox"/> If/Else	<input type="checkbox"/> Conditional Looping



Future Work

- Incorporating feedback from Interview sessions
- Integration of curriculum tree with new selection layout
- Feature for teachers to add own curricular items
 - save new curricular item into tree data
- Video Instruction Library
- Creation of “Add New Focus”
 - Option to let instructors to add their own curricular focus
 - Would save new curricular item into tree data