

Project 2A

Website for *Questions about Fundamental Physics and Cosmology* for Dr. Abazajian

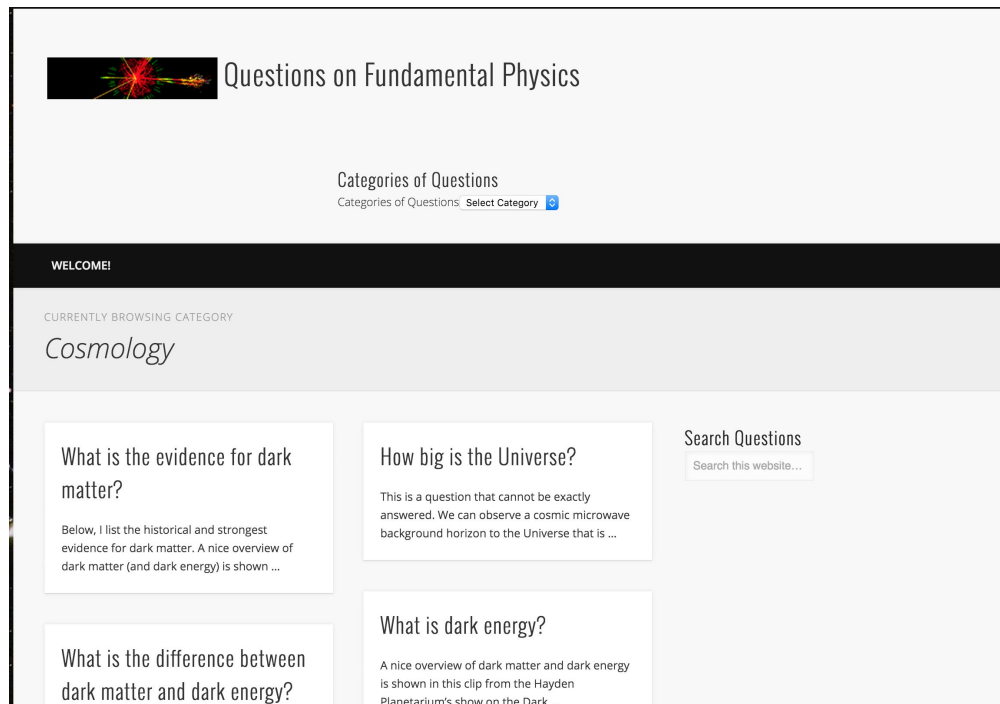
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Project Description

- **(Re)design** and **develop** a website for “Questions on Fundamental Physics and Cosmology”
- Target high usability for **high school teachers** and **undergraduate students**
- Implement functionality to both **search** existing questions and **submit** new queries
- Better implementation of the **tabularity** of topics using **categories** and **tags**

Usability Problems - Customer's Thoughts

- Website interface **isn't user-friendly** or **intuitive**
- Current version is **flat**
- UCI version of Wordpress is **limited**
- There **should be** an **easier** way to ask questions on the website




Usability Problems - Our Thoughts

- Website should focus on **ease of access** for information
- Provide categories as a way to **browse** the website
- Increase ease of question **submission**
 - Make search bar more **versatile**
- Make site design more **modern**, loosely follow **UCI style guide**

UCI

Categories

Questions on Fundamental Physics



Cosmology



Particle Physics

Methods - Interviews & User Testing

Interview Phase: To gain an **understanding** of how and why the website should **exist**

- Does this website **cater** towards any specific needs?
- Does this website foster a sense of **community**?
- How would this website **improve** your life?

User Testing Phase: To test the **usability** and **functionality** of the prototype

- What are your overall impressions of the website?
- If you could make one significant change on this website, what would it be?

Methods - Research Phases

- Submitting **mock-ups** to client for feedback
- Developing a **prototype** based on client feedback
- Conducting **User Testing**
- **Re-evaluating** and **redesigning** prototype

User Subgroups

- Science High School Teachers (3-5)
 - Teaching Astronomy, Physics, or a related subject
- Undergraduate Students (3-5)
 - Currently taking Physics/Cosmology (or related) classes

*If we can't find enough high school teachers, we will pull our test group mostly from undergraduate students

How to Contact Users

- Working closely with Kevork, high school teachers, and undergraduate students
- Reaching out to **high schools around Irvine** and contacting high school teachers who might be interested
- Contacting **professors who teach undergraduate courses** in colleges and universities to acquire a **test group from their students**

Tasks

- Give **initial impressions** on the website
 - Design, colors, text-size, icons, etc.
 - What can be improved on
- Find out how users **search** answers
 - Through categories or through the search bar?
 - Which is more useful or more functional
- Submitting new **questions**
 - Is option easily visible
 - Is the form user-friendly

Implementation

Holy Grail Solution: **WordPress**

Front-End

- HTML5, CSS3 to implement **custom WP theme** based off customer specifications and functionality

Back-End

- **LAMP** (Linux, Apache, MySQL, PHP)
- Wordpress Plugins: **Instant Search**

Timeline and Distribution of Work

Week 3 - Brainstorming and Preparation (Mock-ups)

Week 4 & 5 - Website implementation

Week 6 - User Testing & Interviews

Week 7 & 8 - Website re-designing

Week 9 - Website Finishing Touches

Week 10 - Deployment and Customer Agreement

Front-End: **Daniel, Lorenia**

Back-End: **Keyvan**

User Interactions: **Catherine, Mark, Ney**

Thank You

Questions?