



Walking On The Sun

Brice,.....

Daniel,.....

Greg,.....

& Kyle



Concept and Inception

What if **UCF** was part of a "smart-grid" of green technology that was **powered by footsteps?**

- Capturing and converting the **kinetic energy** of a **footstep** into **renewable electricity**
 - Methods of collecting and converting kinetic "foot power"
 - How much energy could be generated?
 - Assess current technology and review related research
- What media can we converge?
 - Website - Interactivity
 - The Pad (locations and working model) - Graphics, etc.



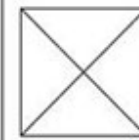
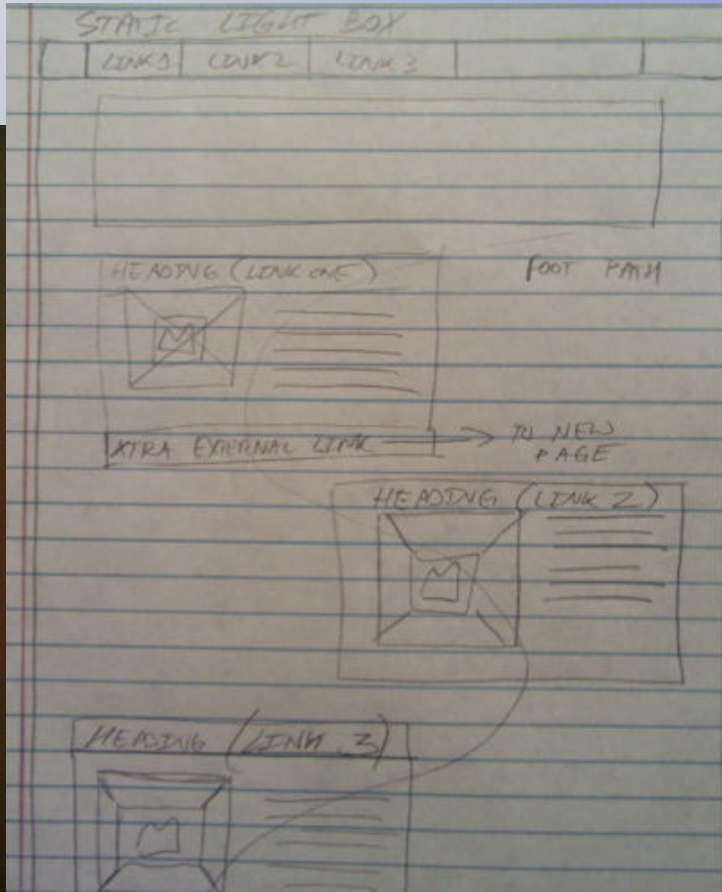
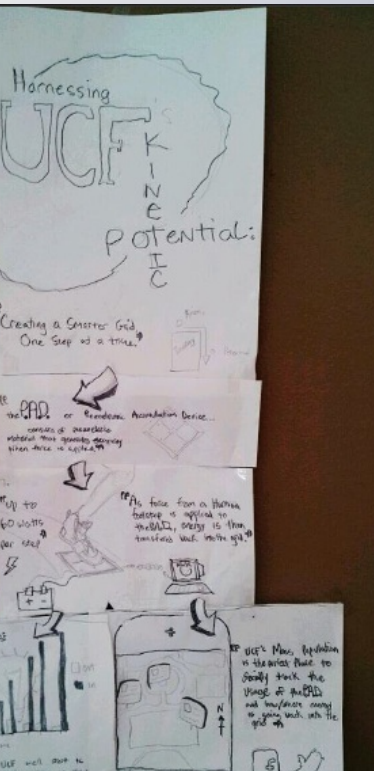
Initial Design Ideas: **Prototype?**

- Expensive "Off-the-shelf" Proposals
 - Pressure sensitive floor mat
 - Presence Detection Sensor/Mat
 - Pressure Switch/Sensor
 - Modified Weight scale
- Cheaper "Do-it-yourself" Alternatives
 - Computer keyboard deconstruction
 - DDR pad hacked and reworked
 - Weight scale with unique counter attachment



Initial Design Ideas: Website

Scrollable story with expandable subsections

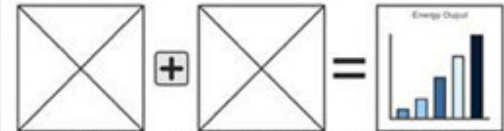


Harnessing UCF KINETIC POTENTIAL

What if UCF was part of a powered by feet?



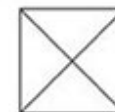
The Concept



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The Technology



P.A.D.S.

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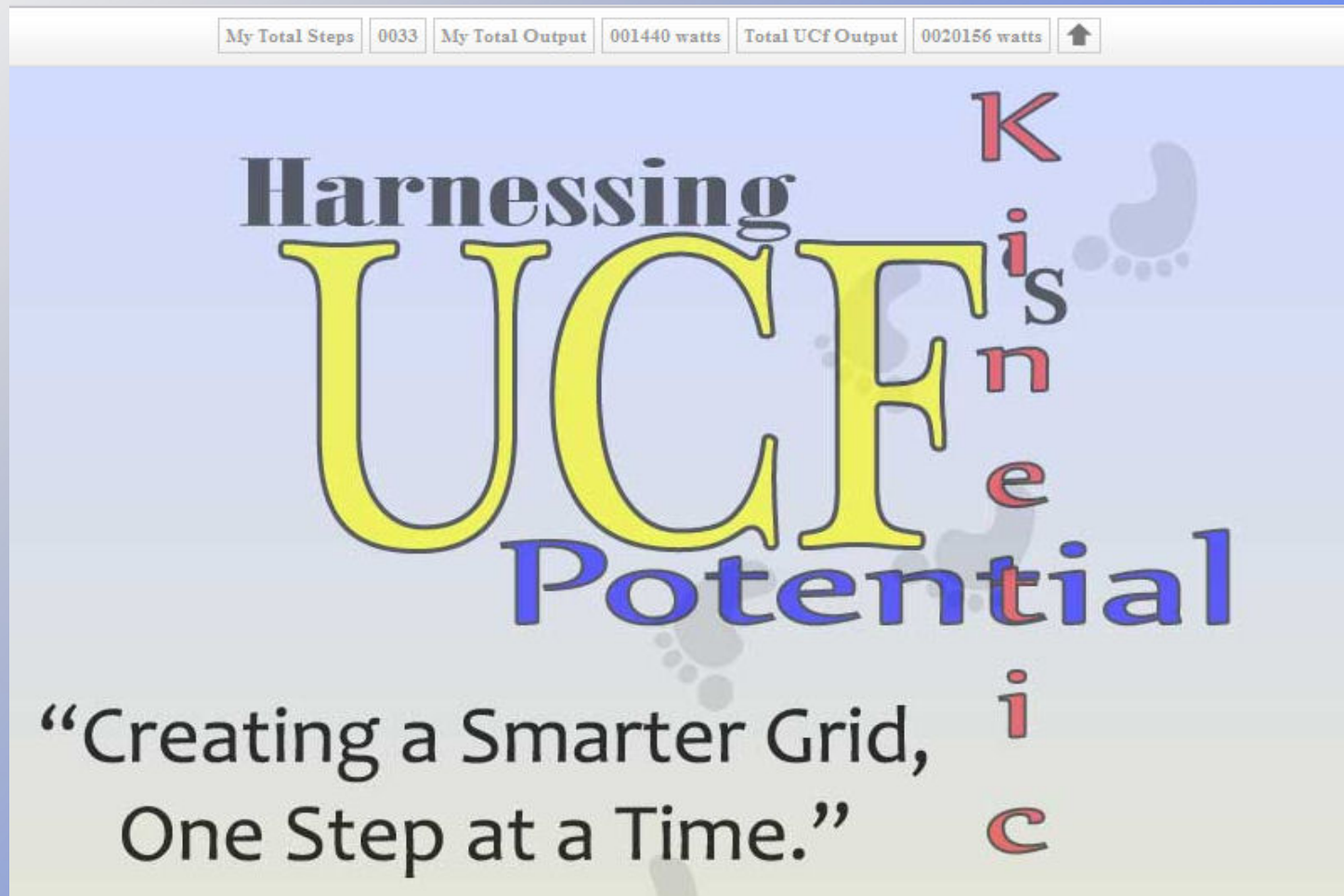
Piezoelectric

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Initial Design Ideas: **Website V1**

Version 1: Static content with integrated "Light Box" counter





Initial Design Ideas: **Website V2**

Version 2: HTML5 mockup with expandable content & animations





The Final Design

Version 3: Combination of V1 & V2 functionality with CSS3

Total Steps00\$Total Output00\$c Watts



Harnessing UCF's Kinetic*Potential*

"Creating a *Smarter* Power Grid, *One Step* at a Time"

What if ... UCF was part of a *Green Smart Grid* powered by footsteps?

640 x 360



Strengths

- Poster Height
- Team of web devs
- Marketing & advertising potential
- Sharing via social media
- Self sustainability
- Low operating cost

Weaknesses

- Scope & time constraints
- Lack of funding
- Lack of contact with "client"
- View next slide

Opportunities

- Energy Independence
- Renewable Energy Source
- Community Involvement
- Expansion
- Incentives and competition

Threats

- Materials Cost, durability maintenance
- Environmental Effects
- Economic Effects
- Efficiency & Cost Effectiveness
- Competition
- General lack of interest



What We Were Lacking : (

- "Research." - Dan Novatnak
 - Production, installation & maintenance costs
 - Durability and Expected Lifetime of the Tiles
 - Foot traffic around campus (x=steps)



If We Were to Continue

Our Next Step..

- We plan to hand the project over to UCF's Civil Engineering faculty
- We would work together with them as a marketing team
- Focus would stay on the Website and Social Media aspects of the project
- Website and social network design, updates, and regulatory maintenance
- Assist in architectural design of "The Spot" locations
- Create unique branding for RFID patches



Walking at UCF in the Future

One day, every step you take on campus will help power it; reducing both UCF's and your own carbon footprints. With so many people walking around every day, it's possible that UCF could eventually stop purchasing energy produced with polluting methods, and rely solely on foot power.