

EE/CprE/SE/CYBE 491 WEEKLY REPORT 01

1/25/2022 - 2/6/2022

Group: 07

Project: Wireless Energy Harvesting

Client: Dr. Jiming Song

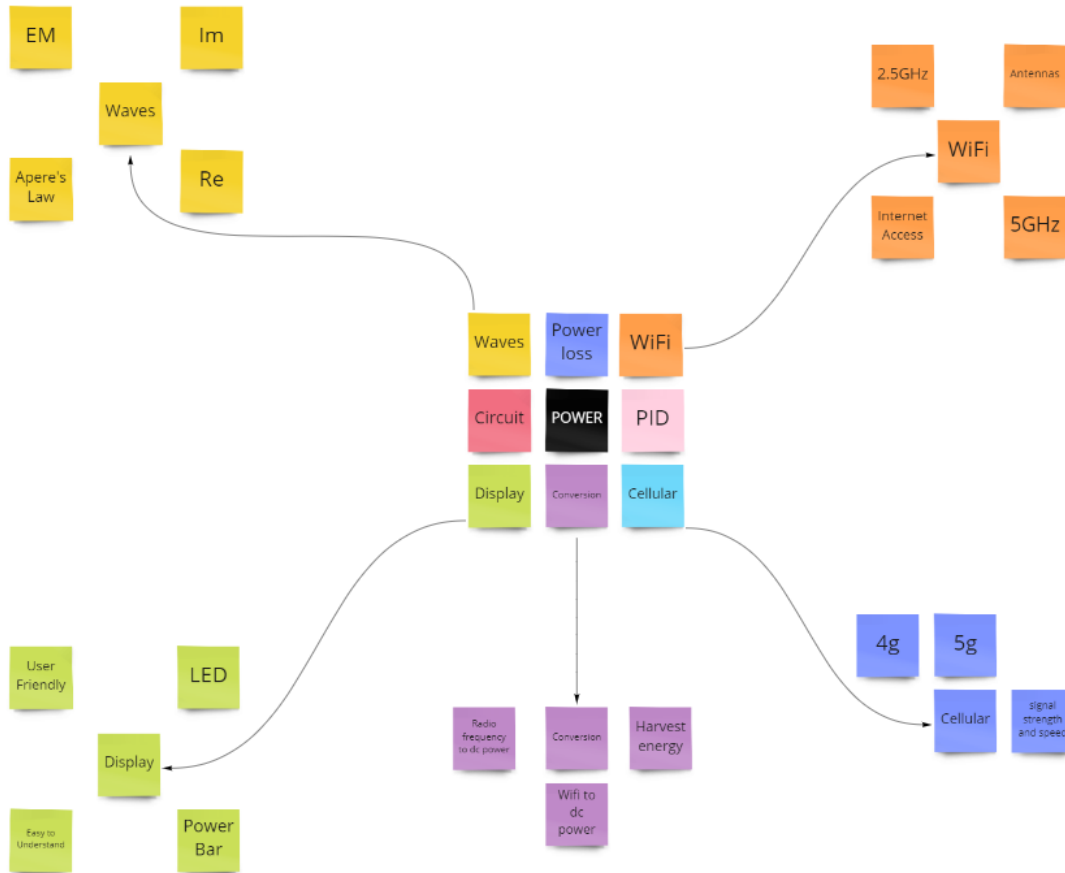
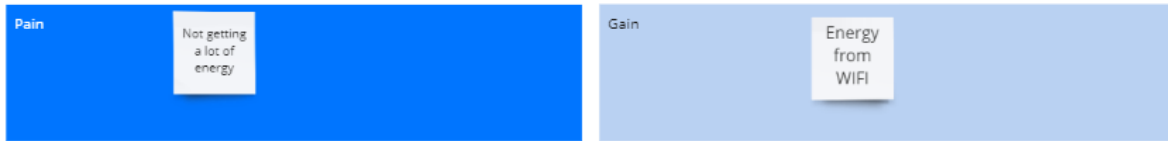
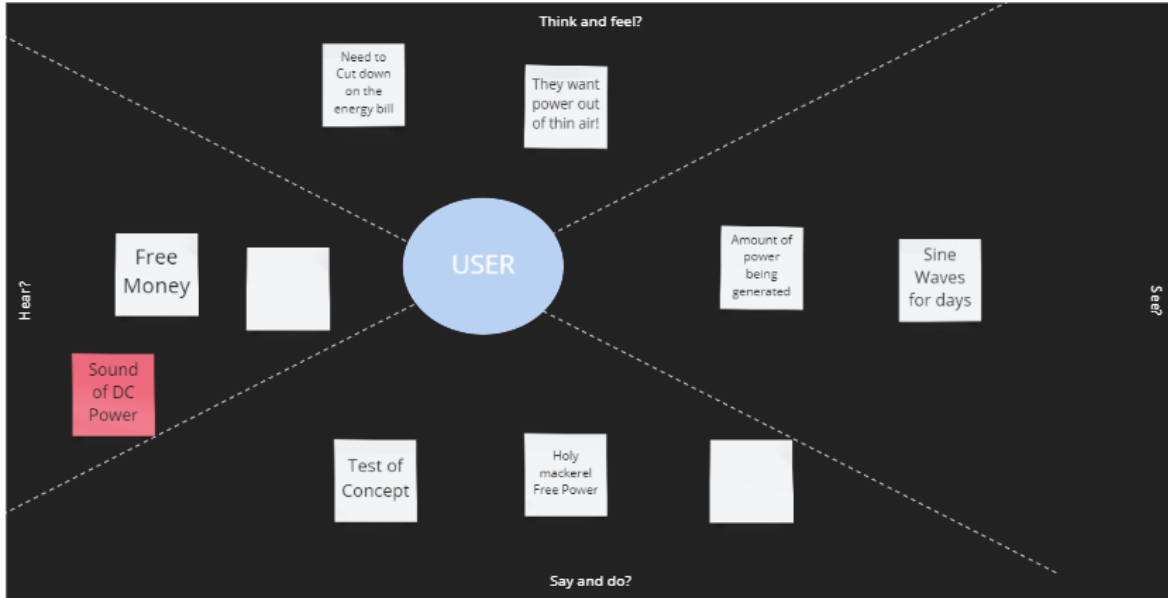
Team: Ben Brown, Christopher Marting, Greg Schmitt, Jacob Walczak, Sam Runkel, Tanner Garity

Links Dr. Song sent us:

<https://www.allaboutcircuits.com/technical-articles/wireless-rf-energy-harvesting-rf-to-dc-conversion-powercast-hardware/>

<https://www.rfdiagnostics.com/store/rfd102a-tb-60hz6ghz-energy-harvesting-test-board>

Weekly Summary: The overall objective of this week was to get to know our client, Dr. Jiming Song, and to better understand our project details, requirements, and outcomes. Our first steps for this week were to familiarize ourselves with wireless energy harvesting. For our meeting, Dr. Song introduced himself and gave us background information about himself as well as his goal for this project. The big goal Dr. Song has for this project is to see how much energy we can get out of the 2.5 GHz wireless band. Depending on how long it takes to figure that out we came to the conclusion that we would make something with our results but will decide on what that will be if we get there. All of us also individually read two articles provided by Dr. Song. Dr. Song also gave us a link to the wireless energy harvesting test board we will most likely use for the project. Additionally, we worked as a team on the Miro Board Design Thinking Workshop. This workshop provided us with an environment to collaborate to better understand our user/client and our design process.



Plans for upcoming week:

- 1) Further our research and understanding of wireless energy harvesting.
- 2) Try to come up with what type of antenna we will be using to capture 2.5 GHz wifi signals.
- 3) Contact Dr. Song about acquiring energy harvesting test board.

Individual contributions:

Name	Individual Contributions	Hours this week	Hours cumulative
Benjamin Brown	<ul style="list-style-type: none"> ● Miro Board Design Thinking Workshop - 1hour 30min ● Client meeting with Dr. Song - 1hour ● Reading articles provided by Dr.song - 30min ● further research on wireless energy harvesting - 30min 	4	4
Jacob Walczak	<ul style="list-style-type: none"> ● Miro Board Design Thinking Workshop - 1.5 hrs ● Client meeting with Dr. Song - 1 hr ● Read the articles given to us by Dr. Song - .5 hrs 	3	3
Greg Schmitt	<ul style="list-style-type: none"> ● Miro Board Design Thinking Workshop - 1.5 hours ● Client meeting with Dr. Song - 1 hour ● Read energy harvesting articles - 0.5 hours 	3	3
Christopher Marting	<ul style="list-style-type: none"> ● Miro Board Design Thinking Workshop - 1.5 hrs ● Client meeting with Dr. Song - 1 hr ● Read the energy harventing articles given to us by Dr. Song - .5 hrs ● Additional research on wireless energy harvesting - .5hrs 	3.5	3.5
Sam Runkel	<ul style="list-style-type: none"> ● Client and advisor meeting with Dr. Song - 1hr ● Reading articles provided by Dr. Song - 0.5hr ● Extra outside research - 1.5 hr 	3	3

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