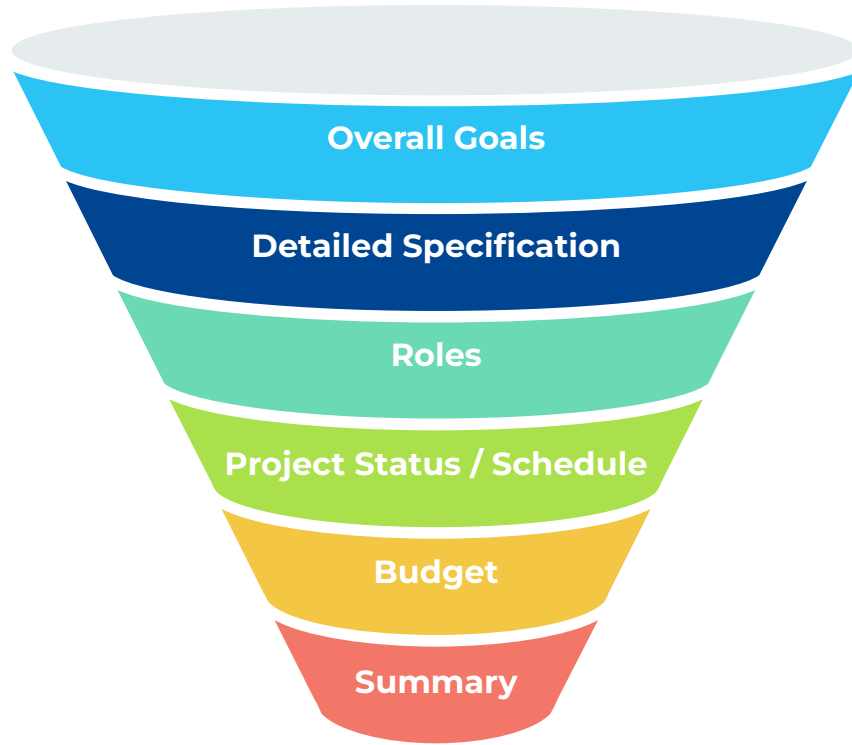




Kristella Lieu, Jianna
Nieves, Nicolette Tumas

Outline



Overall Goals

Goals

- Create a Banner Display for the ECE Center for Intelligent Systems.
- The display will be approximately 8"by 18" display with LED Texts and Graphics.
- Plan to include interesting capabilities such as colors, crawls, animations, etc.
- The display should be easily expandable and should maintain the current date/time & any other important information.

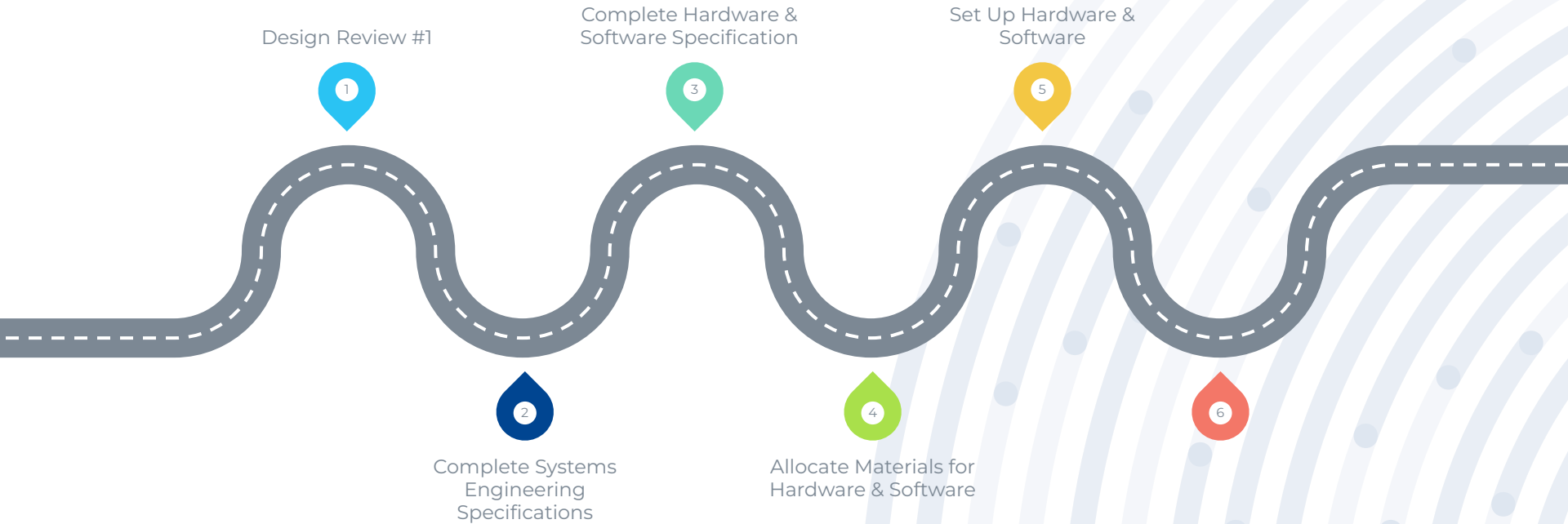
Planned Detailed Specifications

- This project will include PCB design and embedded system design.
- Based on future research and completion of our systems design spec we will decide the best option to use to program the banner.
- Project will be programmed in 'C'.
- We will use an external program connected via USB to update and maintain the display.
- A power source will also need to be included in order to power the displays.

Specific Roles

- Jianna
 - Rendering text and graphics on the display, by maintaining a memory-mapped version of the display pixels.
 - Create or download an appropriate bitmapped font with alphanumeric and punctuation characters.
- Nicolette
 - Design the software and hardware interfacing between the memory-mapped graphics data structure and the physical display.
 - Construct wiring harnesses through the selection of cables and connectors, and any other physical/mechanical considerations.
- Kristella
 - Responsible for architecting the command-line interface, and implementing this on the embedded device.
 - Maintaining current time/date and week of the current semester.

Work Plan: Tasks



Schedule

Week	Week 1 (Aug 29)							Week 2 (Sep 5)							Week 3 (Sep 12)						
	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Task 1 - Prep Work & DR																					
Task 2 - Systems Engineering Specification																					
Task 3 - Hardware & Software Specification																					

Today

Schedule

Week	Week 4 (Sep 19)							Week 5 (Sep 26)							Week 6 (Oct 3)						
Day	19	20	21	22	23	24	25	26	27	28	29	30	1	2	3	4	5	6	7	8	9
Task 4 - Allocate Materials for Hardware & Software																					
Task 5 - Set Up Hardware & Software																					

Budget

	Cost
LED Display x1	\$
Power Supply x1	\$
Total Cost	\$

- After further research that will be done in both the System Engineering Spec and the Hardware/Software Spec we will have a better idea of what the best option is for our supplies. The budget and cost will be filled in based off of those supplies. As of now these are the two items we will need to be looking into purchasing.

Summary / Conclusion

- Our next steps are
 - to finalize the system engineering specifications
 - then to finalize the hardware and software specifications
- We are continuing our research on
 - Text and graphics render on the display
 - Interface between the memory-mapped graphics data structure and the display
 - Implementation of the command-line interface