Informed by our field research, we prototyped *Snowdrop’s Adventure*, a children’s game consisting of a robot rabbit toy, a physical game board & a tablet interface. Children learn logic & computational thinking by programming the robot to move across the board, completing quests & advancing the storyline.

**Key Themes from Field Research**

In 4 field study sessions in participants’ homes, we observed & interacted with 10 children ages 4 to 9 & interviewed their parents.

**Our Design Process**

Our research findings guided our brainstorming, and ultimately led to a prototype game we call *Snowdrop’s Adventure*.

**Iterative Sketching**

During our ideation phase, we generated 13 rough ideas. We chose our 4 best ideas and further refined them into more detailed storyboard sketches.

**Interaction Design**

We created wireframes & high fidelity visual designs of the tablet experience, showing how players would learn coding concepts, program the robot and interact with quests & story characters.

**Character Illustration**

The on-screen Snowdrop character is the counterpart of the robot toy, bringing it to life with a fun & engaging personality and appearance. We went through several rounds of iterative design to get it just right.

**Physical Prototyping**

We build a physical prototypes to represent the tangible aspects of the concept. The game board was built with art materials, and the robot rabbit with Lego blocks and a rabbit finger puppet.

**Other Research**

- Competitive analysis of programming games aimed at children.
- Literature review of academic work on children’s play styles with a focus on gender differences between boys and girls.

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**Our Team**

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