iTech Design Process #3

Explorers will be introduced to innovation and implementation through the design process.

BEFORE YOU BEGIN
1. Leaders should have completed the Leader First Day Survey online at the start of the Exploring unit.
2. Explorers should have completed the Youth First Day Survey online here at the start of the Exploring unit.
3. The Exploring unit should have completed the Intro to Innovation Activity.
4. The Exploring unit should have completed the Design Activity #1 and #2.

ACTIVITY LIBRARY TAGS
- Exploring: Engineering & Technology, Science
- iTech Exploring: Required
- Life Skills: Computer Literacy, Team Building
- US Dept of Education: Information Technology, STEM

OBJECTIVES
By the end of this session, participants will be able to:
- Identify the best ways to incorporate user feedback into a project
- Integrate feedback, feature updates and project fixes into the project
- Categorize feedback and action items to create an implementation plan
- Develop a prototype from market research, paper prototype and user feedback

NOTE: Explorers will reference previous handouts from Design Activity #1 and #2. Bring these completed handouts to the Design Activity #3 meeting.

SUPPLIES
- Sticky Notes (1 pad of 100 sheets per group)
- Poster Paper (1 per group)
- Scrap paper (5 – 10 sheets per group)
- UN Sustainable Development Goals (use as a reference)

LEADER NOTE: Text in italics should be read aloud to participants. As you engage your unit (post or club) in activities each week, please include comments, discussions, and feedback to the group relating to Character, Leadership, and Ethics. These are important attributes that make a difference in the success of youth in the workplace and in life.

ACTIVITIES
Activity 1 | Creating & Organizing a Plan

Say: Discuss the feedback received. How can you adjust your project to incorporate these changes?

YOUTH LEADERSHIP POSITION: Design & User Feedback Managers should lead their team through the following section.
Explorers will use their prototypes to create their project and move to the next phase of implementation. Explorers will determine the best way to move forward with their project, how to divide the work and the best method of communicating between team members. Allocate 5 minutes to regroup from the last lesson and create a plan for the work time.

Explorers can use poster paper and/or sticky notes to keep track of their to do list and delegation of tasks. As a reference, they can use the below chart as a guide for how to keep track of their to do items:

<table>
<thead>
<tr>
<th>To Do item</th>
<th>Assigned to</th>
<th>Notes / Comments / Blockers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example: Add ‘About’ button</td>
<td>John</td>
<td>Can’t complete until home page is built</td>
</tr>
</tbody>
</table>

Say: A “blocker” is anything that stops the delivery of the product. Without the elimination of the blocker, the team cannot advance at all. As a team, how can you ensure that you tackle blockers quickly and prevent them from slowing your team down?

Activity 2 | Implementing the Plan

YOUTH LEADERSHIP POSITION: Project Managers should lead their team through the following section. Quality Assurance Managers and Design & User Feedback Managers should assist the team, focusing on their respective areas of responsibilities.

After creating an implementation plan and to do list, Explorers will use their prototype to create their project. Explorers will break from their group and work individually on their assigned part of the project. When completed, they can cross off the item and take on a new task.

Explorers will have the remaining time to implement and create their project. Provide time updates to the unit every 30 minutes to help teams stay on track. As leaders walk around, make sure that all Explorers are contributing to the project and taking on new tasks when finished.

LEADER NOTE
Once Explorers have completed the Design Activity #3, they will move onto Design Activity #4 in the Exploring Activity Library at www.exploring.org/activity-library-category/itech. Save the completed handouts from Design Activity #1, #2 and #3. Explorers will use these handouts as a reference in future activities.
LEADER NOTE
Some sample questions are below. They are designed to help the participants apply what they have learned to their own interests. You are welcome to use these questions or develop your own questions that relate to your unit or specific focus area.

REFLECTION

- What factors did you consider when creating a solution for social good? Why was this problem important to you / your team? Why do you think that your project solved the problem?
- What changed from your first to second prototype? Could you apply this process to other projects in your life? Give some examples.
- What was most difficult for you when developing your project? The easiest? Why?
- How did the user feedback change your project once you started implementing?

Content for this session provided by Kiwi Compute (www.kiwicompute.com).

Links to other websites are provided for your convenience and information only. When you click on a link to another website, you will be leaving this website. The fact that we provide links to other websites does not mean that we endorse, authorize, or sponsor the linked website, or that we are affiliated with that website’s owners or sponsors. Unless otherwise indicated, the linked sites are not under our control and we are not responsible for and assume no liability for the content or presentation of any linked site or any link contained in a linked site, or any changes or updates to such sites. Your use of a linked site and its content is at your sole risk and may be subject to restrictions and/or limitations. Always take care to abide by the linked site’s terms of use, including any permission requirements/guidelines.