**Smart Apartment Technology:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Technology** | **Description** | **Cost** | **Next Steps** | **Launch Date** |
| **Magic Mirror** | A mirror that, when activated, becomes a smart home display. Shows various smart sensors and products. Can be programmed to do a lot of different things as needed.We will display our Crypto currency stats. | $200 | Buy supplies.  Work with Fab Lab to construct casing. Write desired programs. | Fall 2021 |
| **PiHole** | Machine that manages Internet traffic, displays statistics, and allows for outside users to access apartment. | $100 | Purchase parts, program machine, install. | Fall 2021 |
| **City Grid** | A city power grid model that will allow the simulation of someone taking over a municipal power grid. | $100 | Design experiment, purchase parts, program machine, install. | Fall 2021 |
| **Smart Garden** | A garden with various sensors that detect things like lights and soil moisture and self-corrects by either watering itself or turning on grow light. | $200 | Design Experiment, purchase parts, program machine, install, grow. | Fall 2021 |
| **Retro Pi Table** | An arcade-style table that allows people to play retro video games, but also serves as something that can be hacked and made to cause chaos. | $250 | Design, work with Fab Lab on fabrication, buy parts, assemble, program, install, play. | Winter 2021 |
| **AI Art** | An art exhibit that automatically generates a new fully AI art piece in intervals or when a button is pressed. | $200 | Design, Work with Fab Lab to fabricate, buy parts, assemble, program, display. | Fall 2021 |
| **Crypto Currency** | Various types of crypto currency that will be both mined and purchased to display crypto in action and be observed. | NA (privately held by BRG & MM) | Continue to mine, display asset values. | 4/23/2021 |

**Smart Apartment Programs/Events:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Program** | **Description** | **Cost** | **Next Steps** | **Launch Date** |
| **Bug Bounty** | An incentive program to earn points by completing programs in the smart apartment. This also is a tool that teaches learners how a bug bounty works, what responsible disclosure is, and how to patch bugs in a system. | SWAG | Develop scoring system, develop responsible disclosure form, develop rules, create leaderboard for website, design swag, launch.  Potential Partners: CIE, LV Tech | Fall 2021 |
| **Swag** | NCC Smart Apartment Branded gear that both promotes and incentives the use of the smart apartment. | $200??? | Finish designing logo, get good pricing, determine what type of swag to get, stock up. | Fall 2021 |
| **Spot the Surveillance** | An AR and Online experience that allows you to explore the room in person or online and try to identify the ways in which someone can be spied on in the smart apartement, with explanations of how each element works. | Web Server requested in Capital for CMED. | Develop platform, program elements, design smart apartment, program in AR experiences. | Fall 2021 |
| **Artificial Intelligence** | Various AI projects that will be developed using the NVIDIA grant to help showcase the possibility of AI. Will change regularly. | $200 (Covered by NVIDIA Grant) | Received NVIDA supplies. Develop AI exhibits, program, deploy. | Fall 2021 |
| **Drones** | Partner with Lehigh County Drone program to develop consumer-based program. | $1000 covered by CMED | In the process of writing a contract for developer. | Development SUmmer 2021; courses offered Fall 2021 via CMED |
| **Innovation Cookbook (10 Lesson Plans)** | 10 lessons plans that someone who brings a group into the smart apartment can conduct as an educational experience. | Included in cost of Technology | Finish Smart Apartment design. Develop 10 lesson plans. | Fall 2021 |

**Smart Apartment Events:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Event** | **Description** | **Cost** | **Next Steps** | **Launch Date** |
| **Capture the Flag** | An event held at NCC that brings in groups of ethical hackers and enthusiastic to spend a weekend completing a project for a competition. | $0-$3,000 (Depends on if we partner or host ourselves) | Find partners, look into facility compatibility, promote, advertise. | Spring 2022? |
| **DeSales Hack Partnership** | An event held each semester where DSU hacks our Smart Apartment and we hack their Crime Scene house. | NA | Work with DSU and NCC faculty & Cmed Partners | Spring 2022 |
| **NASA Lending Library** | Create a display using NASA equipment that showcases technological change since the launch of the first Space Shuttle | Shipping costs | Review catalog of available pieces, complete paperwork, create installation. | Summer 2022 |
| **MIT Media Lab Partnership Development** | Work with MIT’s Media lab to design and use basic robots in competition-style events. | Depends on funding sources. | Meet with Media Lab staff and develop partnerships. | Summer 2022 |
| **Partnership Developments (ongoing)** | Making partnerships and creating opportunities to gain attention and attendance to our computer programs. | ? | Look for opportunities to partner with other Community Colleges and local programs to form relationships with and develop future programing. | Fall 2021(Ongoing) |

**Smart Apartment Website:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Asset** | **Description** | **Next Steps** | **Launch Date** |
| **Industry News** | News about topics related to those covered by the smart apartment. | Find appropriate news aggregators and link them to our website. | Fall 2021 |
| **Opportunities** | A list of opportunities and programs to get involved in the communities associated with the smart apartment. | Find and subscribe to event posts and accounts that share opportunities in the communities association with the smart apartment. | Fall 2021 |
| **Bug Bounties** | A description of our bug bounty program (described above) and how to submit a bug report, what a big is, general education about bug bounties and our program specifically. | Integrate our bug bounty program into the website to display leaderboard and reporting system. | Fall 2021 |
| **Leaderboard** | Displays the contributions and achievements of people using the smart apartment. | Covered in integration with bug bounty program. | Fall 2021 |
| **Intro Certs** | A list of introductory certifications that users of the smart apartment might be interested in. | Research an exhaustive list of industry standard introductory certifications. | Fall 2021 |
| **Expert Certs** | A list of expert certifications that users of the smart apartment might be interested in. | Research an exhaustive list of industry standard expert certifications. | Fall 2021 |
| **Smart Apartment Programs** | A list of programs that we offer in the smart apartment. | List the programs in the smart apartment. | Fall 2021 |

**Smart Apartment Funding:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Funding Source** | **Project** | **Amount** | **Timeline** | **Notes** |
| **NVIDIA** | AI Projects | $200 | Summer 2021 | Shipped to Smart Apartment. |