**Monthly Progress Report**

**PROYECTO FINAL**

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| **A. GENERAL DATA** | | | |
| Project Name: | Smarterra IOT Soil Moinsure | | |
| Project Team: | Axel Medina “2021-1781” – Juan Padua “2022-2104” | | |
| One sentence summary | Manufacturing of a 3D printer and the software development as an education system in order to stimulate the STEM (Science, Technology, Engineering and Math on the students. | | |
| Expected Results and Impacts  (one sentence) | The key technology to be developed will be a 3D Printer with and Educational Interactive Software, including Virtual Reality and Coding, in order to provide a learning environment in which the real and digital worlds come together to enhance the students performance and dramatically improve the process of knowledge-transfer. | | |
| Duration of implementation (months) | 4 months | | |
| Total Budget (in USD) | $180 | | |
| Start date: | 15/05/2025 | Finish date: | --------------------- |

**B. Monthly Progress Report**

1. **PROGRESS SUMMARY. Highlight the most significant achievements made during the period.** In no more than one page indicate the activities and progress made by objective. (Please outline the activities done per each objective). Attach / include all evidence.

The following activities were done in the month of January 2021:

**1. Acquisition of Equipment & Administrative.**

1. Followed up with the purchasing department on the items requested.
2. Completing the purchasing request for the remaining materials and equipments. Preparing the purchasing request for the materials needed for the mechanical part (construction of the frame/structure) and the electronics for the 3D printer (power supply, motors, microcontroller).
3. Preparing contracts for the remaining of the research team.

**2. Prototype Development**

With regards to the product development, the following activities were done

1. Completing the design of the 3D printer with a CAD software.
2. Selection of materials for the frame/structure of the 3D printer.
3. Testing of the frame/structure of the 3D printer.
4. Developed an IOS / Android application using the Unity IDE and the "Vuforia" framework with the aim of merging VR and AR and 3D printing in a STEAM learning model.
5. Still testing different platforms for printing a 3D objects with a VR and AR software.
6. Building an AR app using ARCore. ARCore is a software from Google that turns your regular smartphone camera into an augmented reality camera.

**2. Project Schedule and Progress.** (Please indicate the activities for the period as well as the amount of hours worked by team members).

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|  | **Jan 2021** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | Scheduled activities | | |  |
| Month (days) | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | Done | In progress | unrealized | Progress Rate |
| **1**. **Activities** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| - Activity 1a |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| - Activity 1b |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| - Activity 1c |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| - Activity 2a |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| - Activity 2b |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| - Activity 2c |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| - Activity 2d |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| - Activity 2e |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| - Activity 2f |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |