

Declaration

This is to declare that no part of this report or the project has been previously submitted elsewhere for the fulfillment of any other degree or program. Proper acknowledgement has been provided for any material that has been taken from previously published sources in the bibliography section of this report.

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Approval

The Senior Design Project entitled “**Automated Hydroponic System using IoT and Cloud Computing** ” by Ramiza Maliha (ID#1430592042), Md. Nahid Rahman Ontu (ID#1431123042) and Syed Tahmid Abrar (ID#1430651042) has been accepted as satisfactory and approved for partial fulfillment of the requirement of BS in CSE degree program on Summer, 2019.

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Abstract

In this report, we have explored the idea of automation in regards of hydroponic system. The purpose of this project was to make this process more manageable and accessible for the masses so that the people of Bangladesh can re-establish the slowly falling agricultural sector with advance new technology. As the unemployment rate is increasing and people are looking for new ways to stabilize the growing economy that people of Bangladesh has worked hard for, the most lucrative offer can come from the most back dated sector of our country, thus the hydroponic system.

Hydroponic system can be the emancipator of our agricultural system, albeit the venture is quite risky due to the fact that we lack both knowledge and resources. Since, hydroponic system present itself as something of a sacrilege, which more often than not, people tends to avoid. Furthermore, with the backward technology we have mixed with the lack of understanding, most of the enthusiast either gives up half way or are still struggling. Ergo, this project is aiming to help the entrepreneurs to invest in agriculture so that we can not only reinvent our agriculture sector with new generation of young people, but also provide the country with adequate food, medicinal plant, foreign plants etc. We are integrating internet of things (IoT) and cloud computing to ease the hydroponic system, which requires constant maintenance, so that the new comers has more access.