CSE 321 – Project 3

STAGE 1

FALL 2021 – 19TH NOVEMBER

BODHISWATTWA BASU

State University of New York at Buffalo

**Part A: Project Statement**

During and after the course of the pandemic, the entire world had felt its effects. Restrictions on gatherings, events and crowds, in general, were implemented heavily to combat the spread of the deadly virus.

Restrictions on crowd capacity in spaces

**Part B: Initial Constraints and Specifications**

**Part C: Asks**

**Part D: Preliminary Bill of Materials**

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| Peripherals | Where to buy |
| LCD Screen | [Amazon](https://www.amazon.com/SunFounder-Serial-Module-Display-Arduino/dp/B019K5X53O) |
| Ultrasonic Transducer | [Amazon](https://smile.amazon.com/SainSmart-HC-SR04-Ranging-Detector-Distance/dp/B004U8TOE6/ref=sr_1_61?crid=2ZECVUH3BF3V9&dchild=1&keywords=arduino+sensor&qid=1598036922&s=electronics&sprefix=arduino+sen%2Celectronics%2C165&sr=1-61) |
| Buzzer | [Amazon](https://www.amazon.com/ARCELI-3-3-5V-Passive-Trigger-Arduino/dp/B07MPYWVGD/ref=sr_1_6?dchild=1&keywords=buzzer+arduino&qid=1598037910&sr=8-6&pldnSite=1) |
| 4x4 Keypad Matrix | [Amazon](https://www.amazon.com/Matrix-Membrane-Switch-Keyboard-Arduino/dp/B07THCLGCZ/ref=sr_1_2?keywords=4x4+keypad&qid=1637189296&s=electronics&sr=1-2) |
| Nucleo-L4R5ZI | [DigiKey](https://www.digikey.com/en/products/detail/stmicroelectronics/NUCLEO-L4R5ZI/7807685) |
| Breadboard | [Amazon](https://www.amazon.com/HJ-Garden-Electronic-Component-Breadboard/dp/B077SLZWCR/ref=sr_1_12_sspa?crid=7H3WXV3OQECC&dchild=1&keywords=arduino%2Btilt%2Bsensor&qid=1598037028&s=electronics&sprefix=arduino%2Btilt%2Celectronics%2C185&sr=1-12-spons&spLa=ZW5jcnlwdGVkUXVhbGlmaWVyPUEyNUtZNTRSUjQ4NjJWJmVuY3J5cHRlZElkPUEwMjU0ODA0MzIwU1NWNklKTTNTMCZlbmNyeXB0ZWRBZElkPUEwNzg2NjUzOVc5SFhBQVZDOFZBJndpZGdldE5hbWU9c3BfbXRmJmFjdGlvbj1jbGlja1JlZGlyZWN0JmRvTm90TG9nQ2xpY2s9dHJ1ZQ&th=1&pldnSite=1) |