Contactless Clock-In Application for workplaces

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Abstract

Covid-19 has brought the world to a standstill for the past year and many workplaces have been forced to close down for fear of transmitting and contracting the virus. This virus can be spread easily by surface contact, which can be near impossible to avoid at many workplaces that are unable to work remotely.
A particular area that is regularly accessed by all the members of a workplace, usually at the same time on a daily basis, is the clock-in system. This can result in the transmission of Covid-19 between employees and managers, leading to them not being able to work, the business losing money and also possible deaths.
We are developing an app that will remove the need for employees to clock in to work at the same place and instead clock in and out using their own smartphone. The user of our app can only clock in when they enter the workplace, via their GPS location.
They will also have to confirm they are an employee of the workplace using a facial recognition system, via their front-facing camera. Employee clock-in times will be recorded for the manager to view, thus replacing the need for a physical clock in system. For employees that may not have access to a smartphone, a camera will be set up by reception to allow them to clock in safely.

Authors The authors of this project are Ryan Higgins, Daniel Gallagher, Jack McNamee and Shane McCormack who are three fourth year students studying for a Bachelors of Science Honours Degree in Computing in Software Development in the GMIT Dublin Road campus

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The authors would like to thank

Important Links
1 - Link to Dissertation:

Chapter 1

Introduction

For our project, We wanted to make an application which will allow employees to clock in and out at work using their phone at their workplace.

1.1 Reason for choosing this Project

1.1.1 Technologies we used

Chapter 2

The Application

- Provide a context for your project.
- Set out the objectives of the project
- Briefly list each chapter / section and provide a 1-2 line description of what each section contains.
- List the resource URL (GitHub address) for the project and provide a brief list of the main elements at the URL.

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