Solent University - School of Media Arts and Technology – Computing

**CDA600/CHE600/BCK605/BCC605 Project Outline 2019-20**

**(Formative Assessment Task- Not Graded)**

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| Name | Fathima Shenaz Buhari |
| Course | BSc. (Hons) Software Engineering |
| Project Title | Wearable emotion controller device using IoT |
| Supervisor | Anis Saboordeen |

What area does your project fall within?

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| --- | --- | --- | --- |
| Business Applications | Business Analysis | Computer systems | Cybersecurity |
| Data science | Digital design | **√** Internet of things | Networking |
| **√**  Software engineering | User experience (UX) | Web development | Web design front-end |
| Other please specify: |  | | |

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| What research question needs exploring or what problem/hypothesis will you testing? |
| There are many different types of emotions that influence how we live and interact with others. At times, it may seem like we are ruled by these emotions. The choices we make, the actions we take, and the perceptions we have are all influenced by the emotions we are experiencing at any given moment. I used adults as participants for my research  I chose this topic because Anger is one such strong emotion, which not only affects others emotionally but also harmfully affects the person getting angry. Unrelenting anger and a similar temperament may also lead to hypertension.  And also Anger is experienced in our bodies as well as in our minds. A complex series of physiological (body) events occurs as we become angry. It is associated with resentment, irritability, and rage. It can [bring](https://www.betterhealth.vic.gov.au/health/healthyliving/anger-how-it-affects-people) you anything from a headache and insomnia to digestion problems, skin problems, a heart attack, or even a stroke. What’s more, if you’re a worrier, anger can make it even worse by [strengthening](https://www.researchgate.net/publication/221721892_The_Role_of_Anger_in_Generalized_Anxiety_Disorder) the symptoms of generalized anxiety disorder. A [study](https://www.sciencedaily.com/releases/2015/05/150519105856.htm) proved that a mental disorder can lead to an increase in the risk of cardiovascular disease. In turn, cardiovascular disease can be a cause of liver disease, known as [non-alcoholic fatty liver disease](https://en.wikipedia.org/wiki/Non-alcoholic_fatty_liver_disease), which can progress to cirrhosis and liver failure. Therefore, suffering from anxiety or depression may significantly increase the risk of death from liver disease. Therefore, I recommended this device will help to avoid these kinds of critical situations. |
| Background/context – Why are you doing this project? |
| [Anger](https://www.verywellmind.com/constructive-anger-2797286), depression, and [anxiety](https://www.verywellmind.com/benefits-of-anxiety-2584134) are emotional states that many people experience regularly but try to avoid. Moreover, this is understandable they are designed to make us uncomfortable. These negative emotional states can create extra stress in your body and your mind, which is uncomfortable but also can lead to health issues if the stress becomes chronic or overwhelming. Nobody likes to feel uncomfortable, so it is natural to want to escape these feelings, and the dangers of unmanaged stress are real. However, there is a feeling that people sometimes have that these emotions will last forever or that the feelings themselves are the problem.  I recommend a wearable wrist device to control different levels of emotions.it will help to avoid the impact of anger and depression. The device detects your pulse and identifies the range of emotions and communicates with the controller and it will work how it was commanded.  I hope the progress will help to enhance the unhealthy range of emotions. |
| In what ways you are using technology and innovation to address your research question or hypothesis? Is there already something similar? If so, how is your idea/approach different? |
| Already some of them are researched about my topic and they mentioned as Anger triggers the body’s ‘fight or flight’ response. Other emotions that trigger this response include fear, excitement, and anxiety. The adrenal glands flood the body with stress hormones, such as adrenaline and cortisol. Some of the short and long-term health problems that have linked to unmanaged anger include Headache, digestion problems, such as abdominal pain, insomnia, increased anxiety, and depression, and high blood pressure, skin problems, such as eczema, heart attack, and stroke.  As you become angry your body's muscles tense up. Inside your brain, neurotransmitter chemicals known as catecholamine are released causing you to experience a burst of energy lasting up to several minutes. This burst of energy is behind the common angry desire to take immediate protective action. At the same time, your heart rate accelerates, your blood pressure rises, and your rate of breathing increases. Your face may flush as increased blood flow enters your limbs and extremities in preparation for physical action. |
| What methods do you intend to use to evaluate your project and how will you ethically collect data? |
| The project data are based on online sources, And also not used any sensitive data from humans. I used only my data which I had already had for testing purposes. |
| How does your chosen topic relate to your degree title? |
| Project title falls under the areas of the Internet of Things and Software engineering. Therefore, it relates to my degree title. |
| **Areas of Challenge -** In what areas will you need to develop new knowledge and/or skills to complete this project? How will you learn these skills? |
| I do not have a proper idea of human emotions and their ranges then I briefly researched those and I got a clear understanding and also I struggled with IoT because I don't have much knowledge about that therefore I referred some video sessions and I overcome that situation. |

linked to my logbook: https://trello.com/b/UMdflOLk

**Bibliography**

Elizabeth Scott, M., 2020. How to Manage Anger and Stress. [Online]   
Available at: https://www.verywellmind.com/the-effects-of-anger-and-stress-3145076  
[Accessed 31 01 2020].

Le, T., 2012. How Mind-Controlled Devices Will Change Our Future. 18 09.

Mahto, J., 2015. Why We Need IoT (Internet of Things). Linkedin, 18 11, pp. <https://www.linkedin.com/pulse/why-we-need-iot-internet-things-jugeshwar-mahto>

Chopra, D., 2020. *How To Manage Your Anger*. [online] Chopra. Available at: <https://chopra.com/articles/how-to-manage-your-anger> [Accessed 7 August 2020].