***Overview***

GERD Health & Fitness

Mobile app development is a rapidly increasing technological pathway which creates conveniency for people of all ages and cultures, offering a wide array of possibilities including games and media, business and finance, and health/fitness applications.

For our group project, we plan to design prototypes for an Android and IOS application that will assist sufferers of Gastroesophageal reflux disease (GERD for short) to find out what foods they can and can’t eat, monitor their diet and symptoms, provide feedback based on those criteria, and hosts a meal planning nutrition calculator specific to people with GERD who are not just trying to find out which foods they can and can’t eat, but also to set up a diet which will help them to pursue health and fitness goals.

Although there are some apps currently available which resemble parts of the proposed GERD Health & Fitness app, none of them meet all of these topics/requirements, grouping a large variety of useful tools and information together in one place of convenience; a single app to be downloaded on the users’ phone.

The convenience mentioned above is also why we have selected to create a phone app rather than a website, as well as the fact that a mobile app can be personalised easier and therefore tailored exactly to the clients needs such as saved/personalised data and helpful notification reminders.

Our group has a common interest/motivation in our desire to help people in need. Because of this, the opportunity to create an app that could potentially do exactly this was too good for us to pass up. One of our group members, Jordan Glen is personally affected by GERD, and has undergone quite a tough time dealing with it, including almost daily pains, regurgitation, nausea, and many of the other pre-mentioned symptoms of GERD, as well as having to change his diet and liquid consumption completely, and even undergo investigative surgery in order to finally be diagnosed after having suffered with it for the seven years before then, untreated.

GERD is a condition that has a wide array of symptoms, and yet (albeit sometimes requiring the assistance of medication or further surgery) changes in food and liquid consumption can have a drastically positive affect on the reduction of these symptoms, and the ability to allow the body to heal before further damage is done. If the person fails to do this they can end up with progressively worsening symptoms and the growth of ulcers on their stomach *(Danisa M. Clarrett, MD 2018).*

Not only that, but this condition can also affect a person’s body weight, and as such, many sufferers will go on to set fitness goals, that without very specific diet advise, unfortunately will be extremely difficult, sometimes impossible to achieve.

If this app was seen by future employers in the IT industry, it would demonstrate our ability to develop and maintain mobile software, work well in teams, and commitment towards helping people in need.

As mentioned earlier, there are already some apps/websites that portray some aspects of what we intend to put into our application, such as:

* <https://www.niddk.nih.gov/health-information/digestive-diseases/acid-reflux-ger-gerd-adults>
* <https://aboutgerd.org/>
* GERDHelp mobile app (as well as their website [www.gerdhelp.com](http://www.gerdhelp.com))
* <https://www.foodstandards.gov.au/industry/npc/Pages/nutrition-panel-calculator.aspx>
* Nutrium mobile app (viewable at <https://nutrium.com/>)

The problem is though, all of these websites/applications suit very specific purposes, thus meaning that a sufferer of GERD will then have to jump from website to website and/or use multiple applications just to get the same result that is planned to be placed into this one single, easy to use phone app.

References:

Danisa M. Clarrett, MD 2018, *Gastroesophageal Reflux Disease (GERD),* Missouri Medicine, sited 14-01-2022, < <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6140167/>>