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August 7, 2023

Mr. Keven J. Bennema
Chief Executive Office & Co-Founder
Charter Senior Living LLC
7600 Laurel-Bowie Rd
Bowie, MD 20715

Dear Mr. Bennema:

We are submitting this proposal to encourage your company to look at the most recent survey that we conducted on your senior citizens living in your facility suffering from depression and loneliness. Our app is designed to improve the mental health of senior citizens. It can improve the quality of life of those in your care and benefit your business.

Recently, we have discovered that the recent pandemic Covid-19 has severely affected the mental health of the elderly. Not being able to see loved ones and neglected interpersonal skills have led to a jump in the number of elderly people suffering from depression and loneliness. By investing in our app, we can decrease the number of senior citizens suffering from depression and loneliness and improve the quality of that the once had.

If there are any questions that you would like to ask, then we can be reached at (301)860-4000. If your company has technical questions, our Technology Administrator can be reached at (301)860-4000.

Your consideration of our proposal is well appreciated, and we wish the best for your company in any step you choose to take next.

Sincerely,
Christa Pessima, Funtastic Tech member.

Software and Technology Development

How Loneliness is an Ongoing Problem

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Abstract --- The purpose of this proposal is to present information related to the difficulties senior citizens had to communicate with their families during the pandemic and how this led to them feeling loneliness and developing depression. This proposal will also study the benefits the application will have for senior citizens, and it will help them socialize even if it is in a virtual way, but it will help them feel fewer consequences of the pandemic. On the following pages, you will see the reason we want to develop this project and how this would help senior citizens and their families feel closer than ever. We give an explanation on the steps we spect to

take from the beginning to the end, on how the implementation will work and how it will favor all of us

I.Introduction

During the Covid-19 pandemic, people around the world lost their loved ones. This has caused an influx of loneliness and depression. Both younger and older individuals struggled with adjusting to life around them. But for our senior citizens, who are immunocompromised due to their age, this change hit harder. From being used to seeing and hugging their grandchildren, and children often, to having to adjust, and seeing their loved ones through a window. Loneliness and social isolation are growing public health concerns in our ageing society. Whilst these experiences occur across the life span, 50% of individuals aged over 60 are at risk of social isolation and one-third will experience some degree of loneliness later in life. With the creation of this application, our goal is to reduce that number exponentially, and bring joy to every individual.

II.Problem and Purpose

One of the emotional challenges of getting old is the feeling of loneliness which can lead to depression and anxiety. Depression and anxiety from loneliness can negatively impact their health and well-being. It can accelerate aging and eventually die earlier than expected. Elder people residing in the Charter Senior Living of Bowie were not spared from these emotional challenges. This even got worse during the time of the pandemic. Isolation and restricted interaction had fueled more loneliness and anxiety. Social interaction as an antidote to loneliness was prohibited during the pandemic. And these challenges persist as the world recovers from the pandemic. Several social restrictions are still being implemented for extra precautions since the elderly are the most vulnerable segment of the population when it comes to contagious diseases. Information technology has posed as a potential alternative platform for social interaction needs of elderly people. Since existing social networking applications are too generic and often cater to the current generation, a specific and customized social interaction app should be developed to effectively serve as an interactive platform for elderly people. Following this, the team proposes developing a software application intended to the social interaction need of the elderly to mitigate loneliness which could result in anxiety and depression.

III.Audience

Our primary audience will be Mr. Keven J. Bennema, who is the Chief Executive Office & Co-Founder of Charter Senior Living LLC. Our secondary audience would be the workers who work under Mr. Bennema, as they would be given directions on what to do after reading our proposal. Our tertiary audience will be anyone who may have a loved one in any of Mr. Bennemas' establishments as they would have to be made aware of any changes that will be made regarding their family members

IV.Objectives

The goal of developing a specific and customized software application for the purpose of providing social interaction platform among elderly people is to ensure that the social interaction platform will be useful and relevant to the elderly people. There are several considerations in the social interactions of elderly people. One of them is the need for a simple interface. It is important as well to understand that elderly people are not tech savvy nor had developed a love for technology. Thus, to maximize the opportunity provided forth by technology as far as resolving the issues of loneliness faced by the elderly in the facility, it is necessary for the social interaction software application to be pragmatic for elder people.

V.Scope and Approach

The first step that we plan in developing the software application is to conduct surveys on elderly people with respect to the nature and frequency of their social interaction activities. We will collect necessary information relating to the nature of social interactions among elderly people. This entails learning what they usually look for in social interaction activities. The information gathered and collected will be analyzed to extract insights for developing the customary design of the social interaction software application. Thereafter, a prototype will be tested by randomly selecting elderly people to get feedback as to what else should be improved and integrated in the software. After considering the feedback, the software application will be launched in the facility. For one week, the team will stay in the facility to provide technical skill and knowledge support to elderly users.

VI.Task Analysis

- Determining workers/ senior citizens current knowledge on subject (pretest, surveys, and voluntary interviews)
July 10, 2023 – July 12, 2023
- Development of the app
July 13, 2023-July 20, 2023
- Testing of the app
July 20, 2023 – July 26, 2023
- Launching of the app
July 30,2023

VII.Literature Review

To support the idea of developing a software application and its effectiveness to address loneliness and cases of depression and anxiety among elders, we investigated the importance of social interaction in the life of the elderly people and how the information technology could enhance and improve their social interaction need and activity within the facility. Furthermore, a valuable information needed in the development of a relevant and meaningful software application is to understand the concept of social interaction or participation in the context of elderly people.

In a study conducted by Chen, Zeng, and Fang (2022) shows the importance of social participation or interaction among elder adults. In their study, they found that the level of social participation is strongly associated with the mental health of the older Chinese people (Chen, Zeng, & Fang, 2022). The results showed that older people who participate in variety of social participations exhibits better mental health status than those who had little social engagement or participation in social activities. This is suggestive of the importance of social interaction or participation among elder adults. Meaning to say, social interaction dramatically affects the mental state of elderly people.

Social interaction using online socializing games offers valuable potential to be a great social support tool or alternative in enhancing social interaction among elder people. According to a study conducted, online interventions, such as social games, may strengthen social

interactions and reduce loneliness among older people (Janssen et al, 2022). Online gaming was found to be relevant at the time of social restrictions where face to face interaction is regulated. Interestingly, it is not so much about the game that triggers social interaction but the in-game communication platform within the social online games (Janssen et al, 2022). An excellent feature of relevant social games is the need for challenging and intuitive tasks within the game as it triggers meaningful communication that can strengthen the process of social interactions (Janssen et al, 2022). It suggests as well that in developing social games, it is important to understand what older people look for in the game. This shall provide insights on how to develop a meaningful and relevant software application intended to enhance social interaction among elderly people.

In a concept analysis study conducted by Aroogh and Shanboulaghi (2020), it sheds light on what constitutes social participation or interaction among elder people. The concept of social participation involves two elements. First, it should have emphasis on community-based activities and interpersonal interactions (Aroogh & Shanboulaghi, 2020). Second, it is based on resource sharing, active participation, and individual satisfaction (Aroogh & Shanboulaghi, 2020). These elements are integral insights into the development of a relevant and effective software application for social interaction. The software must feature these elements to be relevant and useful for older people in addressing their social interaction needs and reducing loneliness.

VIII.Methods

Because all the members of the team have their own work area, each team member gathered several studies conducted by doctors, scientists, and other people with high qualifications and discussed as a group the selected topic. The discussion sessions were based on taking turns speaking and sharing the information obtained. Each piece of data was analyzed to find a conclusion of why the application was necessary to improve the mental health of senior citizens in nursing homes.

Analysis: first of all, the most important thing we need to do is to understand the current capabilities every nursing home currently possesses. The study involves finding out what type of devices each nursing home has available, what kind of internet connection they have, the level of knowledge the senior citizens have and not only them but also the staff, and lastly what we could do to help them adapt to the application in case they have disabilities.

Because the main focus of the application is older senior citizens, we need to find a way to help them understand the current technologies, and not only that but we will have to have people capable of dealing with older people to teach all senior citizens how to safely use this technology. It is important for them to understand the dangers and benefits this technology can bring if they use it safely. In order to accomplish this, we believe that having short seminars with them is the best way.

After documenting all the information mentioned above, the next step would be to make the application available to all senior citizens so they can download it and create an account to access it, for that, we plan to have experts in social media applications train the staff inside the nursing homes, on how to properly download and create the account.

IX.Feasibility

As a team, we believe that the application we are proposing, Unlimited Social, can be finished in 20 days (about 3 weeks). We have several advantages for example, each of us has our own development environment in our houses, we have a reliable internet connection that allows us to communicate via webcam in a fast manner using Blackboard Collaborate or Skype, and lastly, we can communicate ideas by using the instance message service, GroupMe. By using the proper code and collaborating with each other in creating a safe application we know that this is not just another social media application but a game changer, that would not only help people communicate with their loved ones but by doing so it will improve their mental health.

Even though people may think that social media usage is mostly done by younger people, the use of it by senior citizens is growing and because of it, we believe in this project. An article that supports our data says “Whereas social media use was until recently mostly associated with younger generations, the use of social network sites (SNS) among older adults is steadily growing (CBS, 2019; Eurostat, 2019). In the European Union the percentage of people aged 55 to 74 years participating in social networks grew from 11% in 2011 to 29% in 2019” (Simons, Reijnders, Peeters, Janssens, Lataster, & Jacobs 2021). We know that with the introduction of an easy-to-use and easy-to-understand app, it will become popular among senior citizens and especially in times when they are not able to reach their families in any other way.

Other people will see this application as an opportunity for investment because of all the opportunities the application will bring. With the implementation of this application, we expect many people in nursing homes will start using it because of its simple use. It is an application that will work well with the older generations. There are many nursing homes around the US and even though, for now, our focus is Charter Senior Living LLC eventually we will be able to reach other nursing homes around the country.

People can trust this application will be a safe investment because during the pandemic we learned that online communication is one of the most important ways of socializing for people and especially for the older generations, who are not able to go out much when they are living in nursing homes. The number of people living in nursing homes keeps growing and we know that that number is not expected to go down any time soon.

X.Data Gathering

The data gathered consists of information collected from several studies conducted by renowned scientists, doctors, and other professionals around the world. Their studies were published on reliable websites that in many cases are government owned.

XI.Qualifications

Our team is composed of CTEC professionals that have their own special qualities such as public speaking, researching, computer programming, and data analysis.

XII.Budget

On average a social app such as LinkedIn, Tumblr and Facebook can range from \$15,000 to \$50,000 depending on the types, elements, features, designs, complexity, and software

development. We can start small and test out the app depending on the reception, we can expand on the app.

XIII. Conclusions and Recommendations

This proposal goes over our reasoning for why loneliness is a critical issue to tackle, and how to resolve the problem. We have provided our objective, our audience, our budget, etc., and believe that we have laid out effective tools to take to make loneliness less prevalent than it already is. I believe that loneliness does not get enough awareness as it can be just as important as depression or anxiety. To resolve loneliness, we must conduct surveys on elderly people with respect to the nature and frequency of their social interaction activities. We will collect necessary information relating to the nature of social interactions among elderly people.

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