DETECTING ALZHEIMER USING APPLICATION

MINI PROJECT REPORT

Submitted by

X.Richard (720818104052)
K.Vignesh((720818104061)

in partial fulfillment for the award of the degree

of

BACHELOR OF ENGINEERING

in

COMPUTER SCIENCE AND ENGINEERING

HINDUSTHAN INSTITUTE OF TECHNOLOGY

(An Autonomous Institution Affiliated to Anna University, Chennai)

COIMBATORE-641032

Date:13.05.21

BONAFIDE CERTIFICATE

Certified that this project report "**DETECTING THE ALZHEIMER USING APPLICATION"** the bonafide work of

X.Richard (720818104052)
K.Vignesh (720818104061)

Who carried out the project work under my supervision.

SIGNATURE **SIGNATURE**

MR.D.Sridhar

Assistant Professor Computer Science and Engineering, department
Hindusthan Institute of Technology, Coimbatore – 641 032.

Submitted for the University Project Viva Voce examination conduced on

……

INTERNAL EXAMINER **EXTERNAL EXAMINER**

DECLARATION

We affirm that the project work titled **"DETECTING THE ALZHEIMER USING APP"** being submitted in partial fulfillment for the award of the degree of **Bachelor of ENGINEERING** in **COMPUTER SCIENCE AND**

ENGINEERING is the record of original work carried out by us under the guidance of **MR.D.Sridhar** Assistant Professor Department of COMPUTER SCIENCE AND ENGINEERING. It has not formed the part of any other project work submitted for award of any degree or diploma, either in this or any other University.

X.Richard (720818104052)
K.Vignesh (720818104061)

I certify that the declaration made above by the candidates is true.

Signature of the Guide

MR.D.Sridhar

Assistant Professor

ABSTRACT

Alzheimer's disease is one of the most devastating brain disorders of elderly humans. It is an undertreated and under-reconditioned disease that is becoming a major public health problem. Alzheimer disease is kind of dementia. Dementia is a syndrome with a going decline of brain functionality. It can affect memory, things skills and other mental abilities. The last decade has witnessed a steadily increasing effort directed at discovering the etiology of the disease and developing

pharmacological treatment. Recent development include improved clinical diagnosis guidelines and improved treatment of both cognitive disturbance and behavioural problems.

Usually this disease is detected by the MRI (Magnetic resonance imaging). MRI uses radio waves and a strong magnetic fields to produce detailed images of the brain. It scans are used primarily to rule out conditions.

Currently the diagnosis of Alzheimer is strongly based on memory symptoms, which we know now are occurring when the disease is quite advanced. The cause of the Alzheimer is due to the gen of APOE4 are around the times greater than the normal persons. Where these disease get mutated in this generation that have a capability to attack the youth people also. A research says people with a high genetic risk, the APOE4 carriers, performed worse on spatial navigation tasks. The people who were affected by these disease can't able to take their own decision, Sort of memory loses, even they lost their identity.

The aim of this project is the creation of low cost and efficient tools to help with Alzheimer detection. In addition, current game technologies have proved to be a convenient tool for healthcare. Therefore, our objective is the creation of novel ehealth applications, accessible for all the patients, using new affordable technologies combined with Human Computer Interaction (HCI) systems. So we construct the application that have a capability to detect the Alzheimer.

ACKNOWLEDGEMENT

I am using this opportunity to express my gratitude to everyone who supported me throughout this project. I would like to thank the Almighty God for blessing me with his grace.

I express my thanks to the Managing Trustee **Smt. Sarasuwathy Khannaiyann,** for providing the essential infrastructure and helping me to carry out this project.

I would like to express my gratitude to the Principal **Dr.C.Natarajan,** for helping me in bringing out the project successfully and for strengthening the ray of hope in me.

I wish to record my deep sense of gratitude and profound thanks to **Dr. Jameer Bhasa, M.E., Ph.D.,** Professor and Head of the Department, Computer Science and Engineering for providing the right ambience needed for carrying out this project successfully.

I am profoundly indebted and very grateful to my project guide **MR.D.Sridhar** Assistant Professor Computer Science and Engineering department for innumerable acts of timely advice, encouragement and sincerely express my gratitude towards him.

I would like to extend my thanks to all other faculty members of the Department of Information Technology who helped me for the completion of the project.

Finally, I thank to my friends and those who helped me directly or indirectly for this project.

X.Richard (720818104052)

K.Vignesh (720818104061)

TABLE OF CONTENTS

CHAPTER 1

INTRODUCTION

CHAPTER 1: INTRODUCTION

Alzheimer's disease progressive mental deterioration that can occur in middle or old age, due to generalized degeneration of the brain. It is the commonest cause of premature senility. It is currently ranked as the sixth leading cause of death in the United States, but recent estimates indicate that the disorder may rank third, just behind heart disease and cancer, as a cause of death for older people.

The causes of dementia can vary, depending on the types of brain changes that may be taking place. Other dementias include Lewy body dementia, front temporal disorders, and vascular dementia. It is common for people to have mixed dementia - a combination of two or more types of dementia. Alzheimer's is the most

common cause of dementia among older adults. Dementia is the loss of cognitive functional thinking, remembering, and reasoning and behavioral

The symptoms for Alzheimer disease is

- Brain cell connections and the cells themselves degenerate and die, eventually destroying memory and other important mental functions.
- Memory loss and confusion are the main symptoms.

The stages are separated into three categories:

- Mild Alzheimer's disease Moderate Alzheimer's disease
- Severe Alzheimer's disease.

Several researches are carried out to diagnosis this disease. A new research says that and doctor have been proved that, these kind of adherent disease can be detected by playing games.

CHAPTER 2

PROJECT DESCRIPTION

CHAPTER 2: PROJECT DESCRIPTION

2.1 PROPOSED WORK:

Alzheimer Disease, a genetic disorder that often inflicts memory loss and dementia in aged patients, has been at the core of recent study which tested the use of the video game as a means to assist in early diagnoses of the illness. By playing, you will help fight a disease that currently affects 45 million people around the world. One of the first symptoms of dementia is the loss of guidance abilities. Our strategy was to create the first mobile game that would challenge and record the navigational skills of players, and in doing so, create a human benchmark for spatial navigation, against which dementia could be measured in the future. When you play, your orientation data will be collected anonymously, stored securely and combined with all other players in the world. The idea is to create the largest database in the world consisting of data collected from a wide audience on human guidance capabilities. This resource will allow in particular to develop in the future new diagnostic tools and treatments against senility.

2.2 STANDARD WORKS IN APP

The Application contains a mechanisms that helps the people to know whether they were affected by the Alzheimer. As mentioned in the above, that it was a disordered disease that makes a people to slow death. These app contains a method to detect the problem in initial state. Our strategy was to create the first mobile game that would challenge and record the navigational skills of players, and in doing so, create a human benchmark, against which disease could be measured in the future. The parameters that measures the Alzheimer is

- Attention
- Reasoning Computing Speed.

CHAPTER 3: SYSTEM ANALYSIS

3.1 Feasibility Study

The feasibility of the project is analyzed in this phase and business proposal is put forth with a very general plan for the project and some cost estimates. During system analysis the feasibility study of the proposed system is to be carried out. This is to ensure that the proposed system is not a burden to the company. For feasibility analysis, some understanding of the major requirements for the system is essential.

Three key considerations involved in the feasibility analysis are

- Economic Feasibility
- Technical Feasibility
- Social Feasibility

3.1.1 Economic Feasibility

This study is carried out to check the economic impact that the system will have on the organization. The amount of fund that the company can pour into the research and development of the system is limited. The expenditures must be justified.

3.1.2 Technical Feasibility

This study is carried out to check the technical feasibility, that is, the technical requirements of the system. Any system developed must not have a high demand on the available technical resources. This will lead to high demands on the available technical resources. This will lead to high demands being placed on the client. The developed system must have a modest requirement, as only minimal or null changes are required for implementing this system.

CHAPTER 4

SYSTEM REQUIREMENTS

CHAPTER 4: SYSTEM REQUIREMENTS

The software was developed in Windows 7. It can run in all the versions of Windows. When the coding is compiled in Linux environment, it also runs in Linux. It requires a minimum of 1GHz processor (Intel or ARM) for running this software and it is well recommended above 2.5GHz. It requires a minimum RAM of 2GB but it also runs in less than 2GB RAM but before starting the compression one have to reduce the compression level. It requires a minimum storage capacity of 40GB.

4.1 SOFTWARE REQUIREMENTS:

.• Unreal engine 4

- Windows 7 -64 bit
- Quard core intel
- nvidia geforce 470 gtx

4.2 HARDWARE REQUIREMENTS:

- RAM – 4 GB.
- Processor – Core i7
- CPU speed- 2.1 GHZ
- Keyboard.
- Monitor.

CHAPTER 5

METHEDOLOGY

CHAPTER 5: METHEDOLOGY

Step 1.

All the packages and tools that are used for the extraction of library files are include in the unreal engine 4 . The Android studio version is very important. That contain Virtual Enabled PC or Laptops to work on unreal engine4. After Installation of unreal engine 4 . lets starts for the working, for creating an application.

These four packages the necessary packages and are sufficient for the proposed work. User Interface, data extraction, Input Generation, text analysis and most importantly Output analysis.

Step 2.

The first and foremost step is to create a simple UI interface. The conditions are people are using this app for detection of diseases. They are not quite in terms like, they won't wait for the execution process, so the execution process must be enough efficient.

The application must be simple for them to handle. The main testing and mechanism are going to implement. All the IQ question are implemented with the time management, based on the scoring the people get categorized. After the user completed the question the relevant results will be mentioned in the Score Tab. The most important thing is error checking modules.

If the user are not intense to play during game starts, the time mechanism is going but the user doesn't reply for the question, that makes an incorrect result. So we going to implement the module, that module makes the user more intension to play.

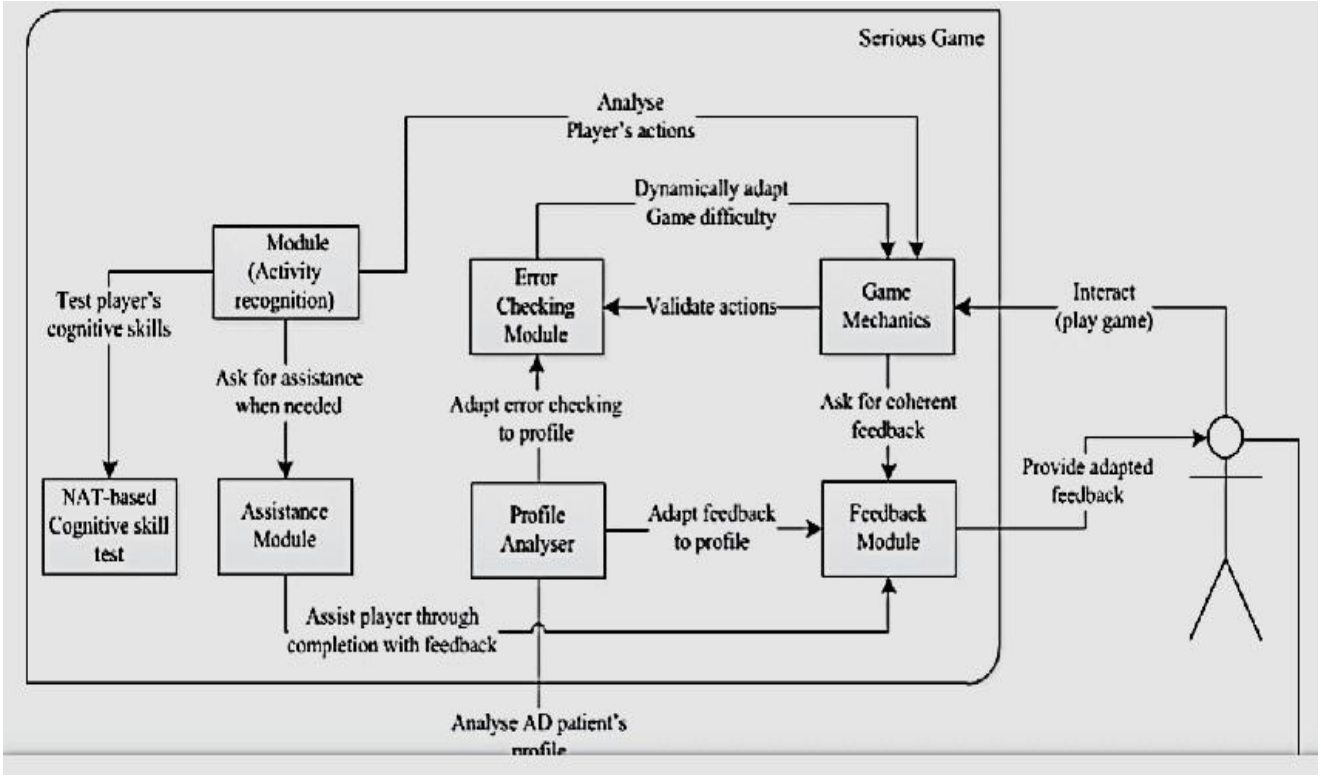


Fig 5.1 Proposed Architecture

Step 3.

The findings are particularly important because a standard memory and thinking test could not distinguish between the risk and non-risk groups. These four packages the necessary packages and are sufficient for the proposed work. User Interface, data extraction, Input Generation, text analysis and most importantly Output analysis. Every iteration of test and scratch mechanism are carried out to prove that, the resultant must be 100% accurate. As we knows that, these kind of defects doesn't have a treatment to get recover, so we need to maintain in pleasant mode, that makes affected people calm. They are not quite in terms like, they won't wait for the execution process, so the execution process must be enough efficient.

Step 4.

The app contains the gaming mechanism. That are nothing but an IQ level tester questions, which enables to detect the percentage values of memory processing for a particular people. The Affected people cannot able to take self-decision, they not even know about their name. So based on this symptoms and constraints the app going too developed.

Step 5.

The most important part is to do design the application along with the time management, because the affected people consumes huge time in solving the problem compared with the normal person. They are always deserted in confusion, based on their activity, we are going to construct the application.

The testing conditions (Parameter) are

- Attention Recognition
- Speed Testing
- Reasoning
- Computing and Memorizing Capability.

Step 6.

The question and the recursion mechanisms are carried out in different state execution. That is, a studies says that, the affected people cannot have ability to get memorize the statements. So based on the concept we are going to set the execution and the process is to remember all the statement of previous state. That enables to categorize the people. For example- If people were affected by the alzhei, then they didn’t have an ability to remember the previous one, so we implement the question (previous state) to answer in the next state.

CHAPTER 6

SYSTEM TESTING

CHAPTER 6

SYSTEM TESTING

Testing is vital to the success of the system. System testing makes a logical assumption that if all parts of the system are correct, the goal will be successfully achieved. In the testing process we test the actual system in an organization and gather errors from the new system operates in full efficiency as stated. System testing is the stage of implementation, which is aimed to ensuring that the system works accurately and efficiently. This will lead to high demands being placed on the client. The developed system must have a modest requirement, as only minimal or null changes are required for implementing this system.

CHAPTER 7

APPENDICES

CHAPTER 7

APPENDICES A:

```
package org.pisimo.mens;

import android.content.Intent;
import
android.support.v7.app.AppCompatActivity;
import android.os.Bundle; import
android.view.View;
import android.widget.Button;

import java.io.FileInputStream; import
java.io.FileNotFoundException;
import java.io.IOException;

public class MainActivity extends AppCompatActivity {

   @Override
   protected void onCreate(Bundle savedInstanceState) {
super.onCreate(savedInstanceState);
setContentView(R.layout.activity_main);        final Intent
settingsAct = new Intent(this,SettingsActivity.class);        final
Intent aboutAct = new Intent(this,AboutActivity.class);        final
Intent testAct = new Intent(this,TestActivity1.class);        final
Intent scoresAct = new Intent(this,ScoreActivity.class);



      //Settings File
      FileInputStream  settingsFile  =  null;
try {
         settingsFile = openFileInput("settings.txt");
         settingsFile.close();
      } catch (FileNotFoundException e) {

         startActivity(settingsAct);

      }       catch       (IOException       e)       {
e.printStackTrace();
      }
```

```
        //Button EVENTS:
        //ABOUT
        Button about = (Button)findViewById(R.id.buttonAbout);
about.setOnClickListener(new View.OnClickListener() {
            @Override public void
onClick(View view) {
                startActivity(aboutAct);
            }
        });

        //SETTINGS
        Button settings = (Button)findViewById(R.id.buttonSettings);
settings.setOnClickListener(new View.OnClickListener() {
            @Override public void
onClick(View view) {
                startActivity(settingsAct);
            }
        });

        //TEST
        Button test = (Button)findViewById(R.id.buttonTest);
test.setOnClickListener(new View.OnClickListener() {
            @Override public void
onClick(View view) {
startActivity(testAct); }
        });
        //SCORES
        Button scores = (Button)findViewById(R.id.buttonScores);
scores.setOnClickListener(new View.OnClickListener() {
            @Override public void
onClick(View view) {
                startActivity(scoresAct);
            }
        });
    }
}
```

AndroidMainFest.xml

```
<?xml version="1.0" encoding="utf-8"?>
```

```
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
xmlns:tools="http://schemas.android.com/tools"
package="org.pisimo.mens">
   <application
      android:allowBackup="true"
      android:configChanges="keyboardHidden|orientation|screenSize"
android:icon="@mipmap/ic_launcher"
android:label="@string/app_name"
android:roundIcon="@mipmap/ic_launcher"
      android:supportsRtl="true"
      android:theme="@style/Theme.AppCompat.NoActionBar"
android:name="android.support.multidex.MultiDexApplication"
tools:targetApi="lollipop">
      <activity
         android:name=".MainActivity"
android:screenOrientation="portrait">
         <intent-filter>
            <action android:name="android.intent.action.MAIN" />

            <category android:name="android.intent.category.LAUNCHER" />
         </intent-filter>
      </activity>
<activity
         android:name=".AboutActivity"
android:screenOrientation="portrait" />
      <activity
         android:name=".SettingsActivity"
android:screenOrientation="portrait" />
      <activity
         android:name=".TestActivity1"
android:screenOrientation="portrait" />
      <activity
         android:name=".TestActivity2"
android:screenOrientation="portrait" />
      <activity
         android:name=".TestActivity3"
android:screenOrientation="portrait" />
      <activity
```

```
        android:name=".TestActivity4"
android:screenOrientation="portrait" />
      <activity
        android:name=".TestActivity5"
android:screenOrientation="portrait" />       <activity
        android:name=".TestActivity6"
android:screenOrientation="portrait" />
      <activity
        android:name=".TestActivity7"
android:screenOrientation="portrait" />
      <activity
        android:name=".TestActivity8"
android:screenOrientation="portrait" />
      <activity
        android:name=".TestActivity9"
android:screenOrientation="portrait" />
      <activity
        android:name=".TestActivity11"
android:screenOrientation="portrait" />       <activity
android:name=".ScoreActivity"
android:screenOrientation="portrait" />
  </application>

</manifest>
```
Layout:

```
<?xml version="1.0" encoding="utf-8"?>
  <android.support.constraint.ConstraintLayout
  xmlns:android="http://schemas.android.com/apk/res/android"
  xmlns:app="http://schemas.android.com/apk/res-auto"
xmlns:tools="http://schemas.android.com/tools"
android:layout_width="match_parent"
android:layout_height="match_parent"
tools:context="org.pisimo.mens.AboutActivity"
android:background="#263238">
  <ScrollView
android:layout_marginLeft="8dp"
```

```
android:layout_marginRight="8dp"
android:scrollbars = "vertical"
android:scrollbarStyle="insideInset"
app:layout_constraintHorizontal_bias="1.0"
app:layout_constraintLeft_toLeftOf="parent"
app:layout_constraintRight_toRightOf="parent"
android:layout_width="0dp"
android:fillViewport="true"
android:overScrollMode="never"
android:layout_height="wrap_content"
android:layout_marginStart="8dp"
android:layout_marginEnd="8dp"
app:layout_constraintTop_toTopOf="parent"
android:layout_marginTop="8dp">

      <android.support.constraint.ConstraintLayout
android:layout_width="match_parent"
android:layout_height="1000dp">
          <TextView
android:id="@+id/textView"
android:layout_width="114dp"
android:layout_height="49dp"
android:layout_marginLeft="8dp"
android:layout_marginRight="8dp"
android:layout_marginTop="15dp"

             android:fontFamily="sans-serif-condensed-light"
android:text="About"
android:textColor="#ffffff"
```

```
android:textSize="45sp"
app:layout_constraintLeft_toLeftOf="parent"
app:layout_constraintRight_toRightOf="parent"
app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintHorizontal_bias="0.502"
android:layout_marginStart="8dp"
android:layout_marginEnd="8dp" />

    <TextView        android:id="@+id/textView12"
android:layout_width="0dp"        android:layout_height="wrap_content"
android:layout_marginLeft="16dp"
android:layout_marginRight="8dp"
android:layout_marginTop="1100dp"        android:fontFamily="sans-
serif-condensed"        android:text="If you do accept to share your
scores in order to improve the test accuracy, your data will be collected
anonymously. We do not have third parts purposes, our only intent is to
provide a good quality test.\n\n"
        android:textSize="19sp"
app:layout_constraintLeft_toLeftOf="parent"
app:layout_constraintRight_toRightOf="parent"
app:layout_constraintTop_toTopOf="parent"
android:layout_marginStart="16dp"
android:layout_marginEnd="8dp" />
    <TextView
android:id="@+id/textView11"
android:layout_width="0dp"
android:layout_height="wrap_content"
android:layout_marginLeft="15dp"
android:layout_marginTop="1050dp"
```

```
android:fontFamily="sans-serif-condensed"
android:text="Privacy"
android:textColor="#FFFFFF"
android:textSize="25sp"
android:textStyle="bold"
app:layout_constraintLeft_toLeftOf="parent"
app:layout_constraintTop_toTopOf="parent"
android:layout_marginStart="15dp" />

        <TextView
android:id="@+id/textViewL"
android:layout_width="0dp"
android:layout_height="wrap_content"
android:layout_marginLeft="16dp"
android:layout_marginRight="8dp"
android:layout_marginTop="800dp"
android:fontFamily="sans-serif-condensed"
android:linksClickable="true"
android:text="@string/contxt"
android:textSize="19sp"
app:layout_constraintLeft_toLeftOf="parent"
app:layout_constraintRight_toRightOf="parent"
app:layout_constraintTop_toTopOf="parent"
android:layout_marginStart="16dp"
android:layout_marginEnd="8dp" />
        <TextView
android:id="@+id/textViewLT"
android:layout_width="0dp"
android:layout_height="wrap_content"
```

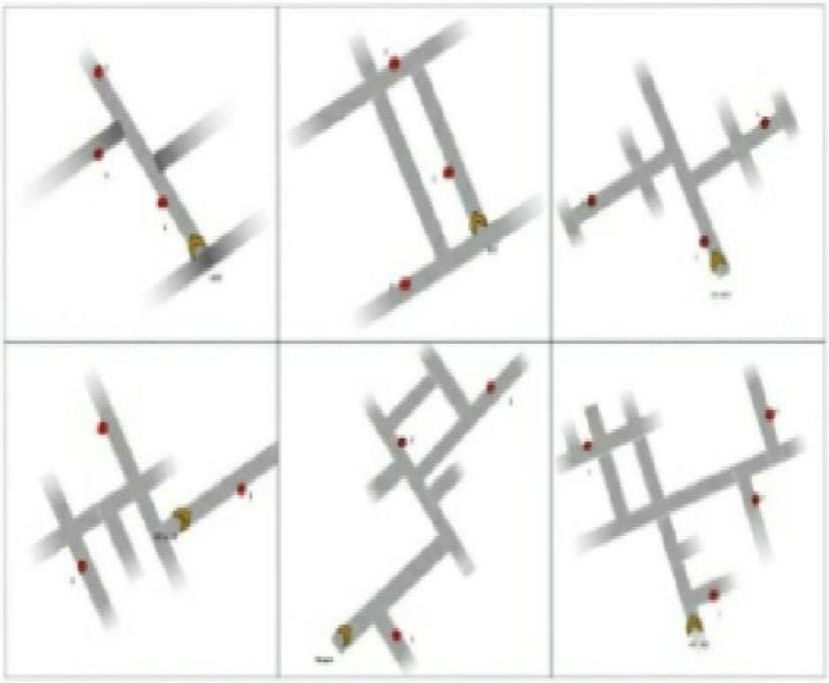
```
            android:layout_marginLeft="15dp"
android:layout_marginTop="760dp"
android:fontFamily="sans-serif-condensed"
android:text="License"
android:textColor="#FFFFFF"
android:textSize="25sp"
android:textStyle="bold"
app:layout_constraintLeft_toLeftOf="parent"
app:layout_constraintTop_toTopOf="parent"
android:layout_marginStart="15dp" />

        <TextView              android:id="@+id/textView10"
android:layout_width="0dp"              android:layout_height="wrap_content"
android:layout_marginLeft="16dp"
android:layout_marginRight="8dp"
android:layout_marginTop="660dp"              android:fontFamily="sans-serif-
condensed"              android:text="This test will never be 100% accurate, due
to the complexity of those disease. But it will anyway give a good metric to
evaluate your memory."
            android:textSize="19sp"
app:layout_constraintLeft_toLeftOf="parent"
app:layout_constraintRight_toRightOf="parent"
app:layout_constraintTop_toTopOf="parent"
android:layout_marginStart="16dp"
android:layout_marginEnd="8dp" />
        <TextView
android:id="@+id/textView9"
android:layout_width="0dp"
android:layout_height="wrap_content"
```

```
android:layout_marginLeft="15dp"
android:layout_marginTop="610dp"
android:fontFamily="sans-serif-condensed"
android:text="Accuracy"
android:textColor="#FFFFFF"
android:textSize="25sp"
android:textStyle="bold"
app:layout_constraintLeft_toLeftOf="parent"
app:layout_constraintTop_toTopOf="parent"
android:layout_marginStart="15dp" />

        <TextView              android:id="@+id/textView8"
android:layout_width="0dp"              android:layout_height="wrap_content"
android:layout_marginLeft="16dp"              android:layout_marginRight="8dp"
android:layout_marginTop="520dp"              android:fontFamily="sans-serif-
condensed"              android:text="The algorithm has been trained on samples
of people with known memory leaks and people without any."
            android:textSize="19sp"
app:layout_constraintLeft_toLeftOf="parent"
app:layout_constraintRight_toRightOf="parent"
app:layout_constraintTop_toTopOf="parent"
android:layout_marginStart="16dp" android:layout_marginEnd="8dp" />

        <TextView
android:id="@+id/textView7"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_marginLeft="15dp"
android:layout_marginTop="470dp"
```

```
android:fontFamily="sans-serif-condensed"
android:text="How was it made ?"
android:textColor="#FFFFFF"
android:textSize="25sp"
android:textStyle="bold"
app:layout_constraintLeft_toLeftOf="parent"
app:layout_constraintTop_toTopOf="parent"
android:layout_marginStart="15dp" />

    <TextView android:id="@+id/textView6"
android:layout_width="0dp"
android:layout_height="wrap_content"
android:layout_marginLeft="16dp"
android:layout_marginRight="8dp"
android:layout_marginTop="330dp" android:fontFamily="sans-
serif-condensed" android:text="To obtain the results, you have
to take a game-like
        test, then the scores will be analyzed by an artificial intelligence algorithm,
        that will compute your final score." android:textSize="19sp"
        app:layout_constraintHorizontal_bias="0.0"
        app:layout_constraintLeft_toLeftOf="parent"
app:layout_constraintRight_toRightOf="parent"
app:layout_constraintTop_toTopOf="parent"
android:layout_marginStart="16dp"
android:layout_marginEnd="8dp" />

    <TextView
android:id="@+id/textView5"
android:layout_width="wrap_content"
```

```
android:layout_height="wrap_content"
android:layout_marginLeft="15dp"
android:layout_marginTop="280dp"
android:fontFamily="sans-serif-condensed"
android:text="How does it work ?"
android:textColor="#FFFFFF"
android:textSize="25sp"
android:textStyle="bold"
app:layout_constraintLeft_toLeftOf="parent"
app:layout_constraintTop_toTopOf="parent"
android:layout_marginStart="15dp" />

        <TextView
android:id="@+id/textView4"
android:layout_width="0dp"
android:layout_height="wrap_content"
android:layout_marginLeft="16dp"
android:layout_marginRight="16dp"
android:layout_marginTop="180dp"
            android:fontFamily="sans-serif-condensed"
android:text="This app computes your memory abilities, to find out possible
signs of Memory Leaks."
            android:textSize="19sp"
app:layout_constraintHorizontal_bias="0.0"
app:layout_constraintLeft_toLeftOf="parent"
app:layout_constraintRight_toRightOf="parent"
app:layout_constraintTop_toTopOf="parent"
android:layout_marginStart="16dp"
android:layout_marginEnd="16dp" />
```

```
        <TextView
android:id="@+id/textView2"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_marginLeft="15dp"
android:layout_marginTop="120dp"
android:fontFamily="sans-serif-condensed"
android:text="What is Mens ?"
android:textColor="#FFFFFF"
android:textSize="25sp"
android:textStyle="bold"
app:layout_constraintLeft_toLeftOf="parent"
app:layout_constraintTop_toTopOf="parent"
android:layout_marginStart="15dp" />
</android.support.constraint.ConstraintLayout>
   </ScrollView>
```



CHAPTER 8

CONCLUSION

Our strategy was to create the first mobile game that would challenge and record the navigational skills of players, and in doing so, create a human benchmark for spatial navigation, against which dementia could be measured in the future. When you play, your orientation data will be collected anonymously, stored securely and combined with all other players in the world. The idea is to create the largest database in the world consisting of data collected from a wide audience on human guidance capabilities. This resource will allow in particular to develop in the future new diagnostic tools and treatments against senility. With the help of this, we can detect the Alzheimer affected people, with accurate statistics.

FUTURE ENHANCEMENT

This project was begun mainly for detection of most adherent diseases and treatment exercise for disease affected people. By using this, detection of deadly disease can be identified in initial stage which helps to recover from initial stage, they prepared just like the proverb “Prevention is better than Cure”. In future this app will help the people to get treatment from doctors (as an intermediate). We will include the treatment guide to enhance the stable of the affected people.

Being our project is mainly focused on increasing the detection and daily exercise and treatment guide, we were not able to create a much interactive user interface with more options which were present in the existing software like Sea Hero Quest so we developed this project as much with simple resources and datasets. Developing a user interface with more options is our future work.

REFERENCES

REFERENCE

[1] Titcomb, James (4 May 2016). "Playing this smartphone game can help fight dementia". The Telegraph. *Retrieved 5 May 2016*.Ostrowski, DA. (2012). Semantic Social Network Analysis for Trend Identification. In IEEE Sixth International Conference on Semantic Computing (pp 215–222).

[2] Kaplan, Sara (7 May 2016). "Two minutes playing this video game could help scientists fight Alzheimer's". Washington Post. Retrieved 8 May 2016.

[3] Ducrohet, Xavier; Norbye, Tor; Chou, Katherine (May 15, 2013). "Android Studio: An IDE built for Android". Android Developers Blog. Google. Retrieved May 16, 2013.

[4] McMillan, Robert (August 1, 2013). "Is Java Losing Its Mojo?". wired.com". Archived from the original on February 15, 2017. Retrieved March 8, 2017. Java is on the wane, at least according to one outfit that keeps on eye on the ever-changing world of computer programming languages..

[5] Ahmadul Kadir, Amelia Marutle, Daniel Gonzalez, Michael Schöll, Ove Almkvist, Malahat Mousavi, Tamanna Mustafiz, Taher Darreh-Shori, Inger Nennesmo & Agneta Nordberg. PET imaging and clinical progression in relation to molecular pathology in first PIB PET AD Patient

[6] GWAS dataset, ADC3, is the third set of ADC genotyped subjects used by the Alzheimer's Disease Genetics Consortium (ADGC) to identify genes associated with an increased risk of developing late-onset Alzheimer’s disease (LOAD). ADC3 was first published in Naj et al.