Project Report

HAND CRICKET

A PROJECT REPORT

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BONAFIDE CERTIFICATE

Certified that this project report titled "**HAND CRICKET**" is the bonafide work of "**SHASHWAT PRASAD [RA2111026010143], ROSHAN PRIYADARSHI [RA2111026010139], SARTHAK DWIVEDI [RA2111026010122]**", who carried out the project work under our supervision. Certified further, that to the best of our knowledge the work reported herein does not form any other project report or dissertation based on which a degree or award was conferred on an earlier occasion on this or any other candidate.

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ABSTRACT

Due to rise in covid case there is lockdown in many places across the world. People were feeling bored in home alone as there is nothing to do. For many people hand cricket is a hobby to play during our school time. So, we basically designed this application that person can enjoy alone with their computer/laptop. In this game,

- This is a game of Hand Cricket that is played against a computer opponent.
- A computer opponent will be playing against the user.
- The user will get to choose his number between 0-6 which he wants to place against the opponent's number which is randomly generated.
- Unlimited matches can be played.
- Unlimited balls that can generate interests in playing the game.
- This application is absolutely **"FREE"**.

Our aim is to make people happy with their childhood memories and make today's children familiar with hand cricket.

ACKNOWLEDGEMENT

We would like to express our deepest gratitude to our guide, Sindhuja M for her valuable guidance, consistent encouragement, personal caring, timely help and providing me and my team with an excellent atmosphere for doing mini project. All through the work, despite her busy schedule, she has extended cheerful and cordial support to us for completing this mini project work.

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INTRODUCTION

As we all know that all children have hobby to play cricket, but due to increasing infrastructure free lands are converted into complexes, due to which there is no free space left for children to play. We basically designed this program for those children who have love for cricket.

Objectives

Due to busy world, no one is free to play together. Everyone is just busy with their works. So, we basically designed this application for those people who feels lonely. They can enjoy their moments if no one was there.

Here person can play unlimited matches in which there is no limit in balls. So, that can build interest in playing the game.

SYSTEM SPECIFICATION

Operating System – Window / IOS
Processor – Intel core i7 / M1 chip
RAM – 8 / 16 GB
ROM – 1 TB (SSD)

ALGORITHM

Step – 1 : Start
Step – 2 : Enter Player Name
Step – 3 : Select Heads or Tails
Step – 4 : Generate a Random Number
Step – 5 : If Enter = Random Outcome
        You won the toss
    else
        Bot won the toss
Step – 6 : Now user / Bot will select Batting / Bowling
Step – 7 : Enter a Number
Step – 8 : If Enter Number = Random Outcome
        Display Out
    else
        Goto step 7
Step – 9 : In 2nd Innings, goto step 7
Step – 10 : If Target > 2nd innings runs
        Display 1st innings batman's team won the match
    else if Target = 2nd innings runs
        Display Match Tie
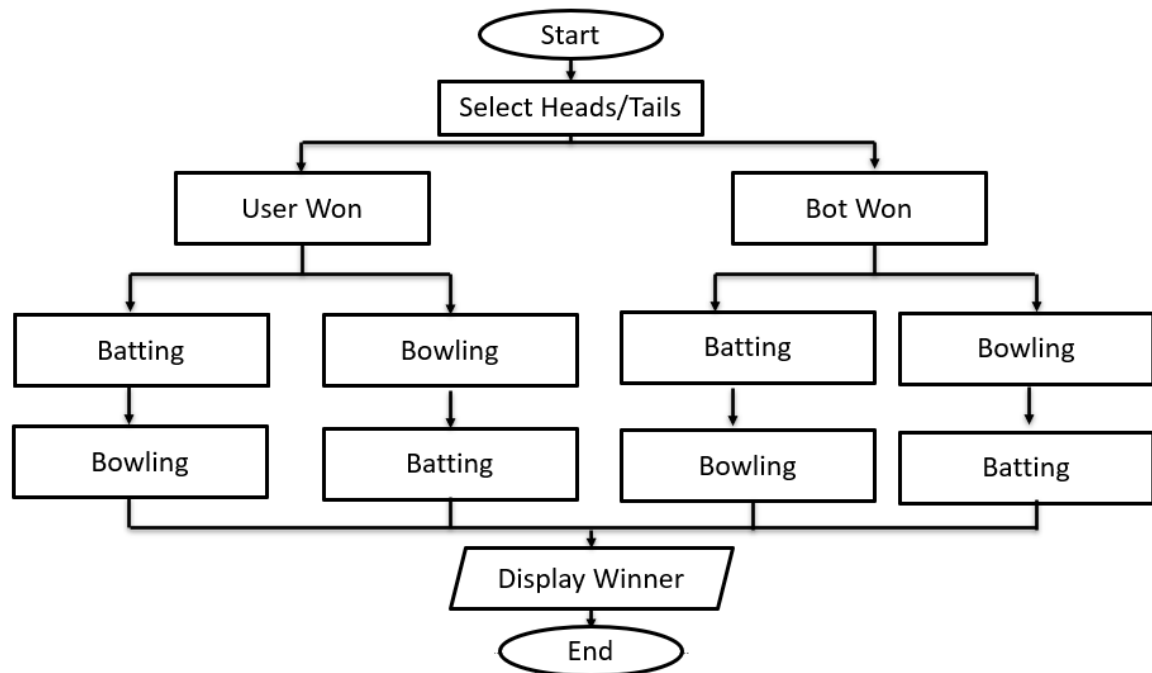   else
        Display 2nd innings batman's team won the match
Step – 11 : End

FLOWCHART

SOURCE CODE

```c
#include<stdio.h>
#include<stdlib.h>
#include<time.h>
void batting_player();
void bowling_player();
void end();
void game();
void play_again();
int main()
{
    system("COLOR E4");
    game();
}
void game()
{
    printf("\n\n\n");
    printf("                              ----------------------------------\n");
    printf("                    Welcome to the Game of Hand
cricket\n\n");
    printf("                         Powered by FAANG\n");
```

```c
    printf("                                 ---------------------------------\n");
    printf("\n");
    printf("\n");
    char name[100];
    printf("                     Enter Player Name - ");
    scanf("%s",name);
    printf("\n");
    printf("                              ---------\n");
    printf("                              Toss Time\n");
    printf("                              ---------\n");
    printf("\n");
    int choice_toss;
    printf("                     Enter your choice (1-Heads Or 2-Tails) - ");
    scanf("%d",&choice_toss);
    int lower=1,upper=2,toss;
    srand(time(NULL));
    toss=(rand()%(upper-lower+1)+lower);
    if(toss==choice_toss)
    {
        printf("\n                      You won the toss\n\n");
        int choice_bat_ball;
        printf("                   Choose batting or bowling (1-Batting Or 2-
Bowling) - ");
        scanf("%d",&choice_bat_ball);
        if(choice_bat_ball==1)
            batting_player();
        else
            bowling_player();
    }
    else
    {
        int bot_choice,lower=1,upper=2;
        printf("\n                      Bot won the toss\n\n");
        srand(time(NULL));
        bot_choice=(rand()%(upper-lower+1)+lower);
        if(bot_choice==1)
        {
            printf("                      Bot is batting");
            bowling_player();
        }
        else
        {
            printf("                      Bot is bowling");
            batting_player();
        }
    }
}
void batting_player()
```

```c
{
    printf("\n\n");
    printf("                          ------------\n");
    printf("                          First Inning\n");
    printf("                          ------------\n");
    int score_1,total_1=0;
    a:
    printf("\n                 Enter The Run You Want To Score - ");
    scanf("%d",&score_1);
    int score_2,lower=0,upper=6;
    srand(time(NULL));
    score_2=(rand()%(upper-lower+1)+lower);
    printf("\n                 Bot Threw - %d",score_2);
    if(score_1!=score_2)
    {
        total_1+=score_1;
        printf("\n                 Total Runs Scored - %d",total_1);
        printf("\n");
        goto a;
    }
    else
    {
        printf("\n");
        printf("\n                 Out");
        printf("\n\n                 Target - %d",(total_1)+1);
        printf("\n\n");
        printf("                      ------------\n");
        printf("                      Second Inning\n");
        printf("                      ------------\n");
        int score_3,total_2=0;
        b:
        printf("\n                 Enter The Run You Want To Ball - ");
        scanf("%d",&score_3);
        int score_4,lower=0,upper=6;
        srand(time(NULL));
        score_4=(rand()%(upper-lower+1)+lower);
        printf("\n                 Run Scored By Bot - %d",score_4);
        if(score_3!=score_4)
        {
            total_2+=score_4;
            if(total_1>=total_2)
            {
                printf("\n                     Total Runs Scored -
%d",total_2);
                printf("\n");
                goto b;
            }
            else
```

```c
                {
                    printf("\n");
                    printf("\n                        Bot Won The Match");
                    printf("\n");
                    play_again();
                }
            }
        else(score_3==score_4);
        {
            printf("\n");
            printf("\n                    Bot is Out");
            if(total_1>total_2)
            {
                printf("\n                    You Won The Match");
                printf("\n");
                play_again();
            }
            else if(total_1==total_2)
            {
                printf("\n                    Match is Tie");
                printf("\n");
                play_again();
            }
            else
            {
                printf("\n                    Bot Won The Match");
                printf("\n");
                play_again();
            }
        }
    }
}
void bowling_player()
{
    printf("\n\n");
    printf("                        ------------\n");
    printf("                        First Inning\n");
    printf("                        -----------\n");
    int score_1,total_1=0;
    a:
    printf("\n                Enter The Run You Want To Ball - ");
    scanf("%d",&score_1);
    int score_2,lower=0,upper=6;
    srand(time(NULL));
    score_2=(rand()%(upper-lower+1)+lower);
    printf("\n                Run Scored By Bot - %d",score_2);
    if(score_1!=score_2)
    {
```

```c
        total_1+=score_2;
        printf("\n                      Total Runs Scored - %d",total_1);
        printf("\n");
        goto a;
    }
    else
    {
        printf("\n");
        printf("\n                      Out");
        printf("\n\n                       Target - %d",(total_1)+1);
        printf("\n\n");
        printf("                              -------------\n");
        printf("                              Second Inning\n");
        printf("                              -------------\n");
        int score_3,total_2=0;
        b:
        printf("\n                      Enter The Run You Want To Score - ");
        scanf("%d",&score_3);
        int score_4,lower=0,upper=6;
        srand(time(NULL));
        score_4=(rand()%(upper-lower+1)+lower);
        printf("\n                      Bot Threw - %d",score_4);
        if(score_3!=score_4)
        {
            total_2+=score_3;
            if(total_1>=total_2)
            {
                printf("\n                      Total Runs Scored - 
%d",total_2);
                printf("\n");
                goto b;
            }
            else
            {
                printf("\n");
                printf("\n                      You Won The Match");
                printf("\n");
                play_again();
            }
        }
        else(score_3==score_4);
        {
            printf("\n");
            printf("\n                      Bot is Out");
            if(total_1>total_2)
            {
                printf("\n                      Bot Won The Match");
                printf("\n");
```

```c
                play_again();
            }
            else if(total_1==total_2)
            {
                printf("\n                        Match is Tie");
                printf("\n");
                play_again();
            }
            else
            {
                printf("\n                        You Won The Match");
                printf("\n");
                play_again();
            }
        }
    }
}
void play_again()
{
    int choice_1;
    printf("\n                        Do You Want To Play The Game Once More ?
(1-Yes Or 2-No) - ");
    scanf("%d",&choice_1);
    switch(choice_1)
    {
        case 1:
            game();
            break;
        case 2:
            end();
            break;
    }
}
void end()
{
    printf("\n\n");
    printf("\n                        ------------------------");
    printf("\n                        Hope You Enjoyed The Game");
    printf("\n                            Thank You");
    printf("\n                        ------------------------");
    printf("\n\n");
    exit(1);
}
```

RESULT & EXPLANATION

```
-------------------------------------
Welcome to the Game of Hand cricket

          Powered by FAANG
-------------------------------------


Enter Player Name -
```

Colour used:
E4
Where E – Yellow (Background)
4 – Red (Text)

This will be your opening page
Where you have to enter the player name

```
-------------------------------------
Welcome to the Game of Hand cricket

          Powered by FAANG
-------------------------------------


Enter Player Name - Sarthak

      ---------
      Toss Time
      ---------

Enter your choice (1-Heads Or 2-Tails) -
```

Just after entering the name
It will show toss time

In toss time
You have to choose 1 for Heads & 2 for Tails

Welcome to the Game of Hand cricket

Powered by FAANG

Enter Player Name - Sarthak

Toss Time

Enter your choice (1-Heads Or 2-Tails) - 1

You won the toss

Choose batting or bowling (1-Batting Or 2-Bowling) -

As you select your choose
By random function it will show any one option
If your option and random number is same then
you won the toss and then you can choose
whether to bat or ball
Else you loss the toss and bot will choose bat or
bowl

Welcome to the Game of Hand cricket

Powered by FAANG

Enter Player Name - Sarthak

Toss Time

Enter your choice (1-Heads Or 2-Tails) - 1

Bot won the toss

Bot is bowling

First Inning

Enter The Run You Want To Score -

First Inning

Enter The Run You Want To Score - 6

Bot Threw - 5
Total Runs Scored - 6

Enter The Run You Want To Score - 6

Bot Threw - 0
Total Runs Scored - 12

Enter The Run You Want To Score - 6

Bot Threw - 0
Total Runs Scored - 18

Enter The Run You Want To Score - 6

Bot Threw - 4
Total Runs Scored - 24

Enter The Run You Want To Score - 6

Bot Threw - 0
Total Runs Scored - 30

Enter The Run You Want To Score - 6

Bot Threw - 3
Total Runs Scored - 36

Enter The Run You Want To Score - 6

Bot Threw - 0
Total Runs Scored - 42

Enter The Run You Want To Score - 6

Bot Threw - 0
Total Runs Scored - 48

Enter The Run You Want To Score - 6

Bot Threw - 3
Total Runs Scored - 54

Enter The Run You Want To Score - 6

Bot Threw - 6

Out

Target - 55

Second Inning

So let begin with first inning
Just any entering number it will
count as run/ball threw to out
If number and random number are
same then batsman will be out
Else innings go on

When the batsman will out
it will automatedly show
the target for second inning

```
             --------------
             Second Inning
             --------------

Enter The Run You Want To Ball - 6

Run Scored By Bot - 2
Total Runs Scored - 2

Enter The Run You Want To Ball - 6

Run Scored By Bot - 5
Total Runs Scored - 7

Enter The Run You Want To Ball - 6

Run Scored By Bot - 1
Total Runs Scored - 8

Enter The Run You Want To Ball - 6

Run Scored By Bot - 4
Total Runs Scored - 12

Enter The Run You Want To Ball - 6

Run Scored By Bot - 0
Total Runs Scored - 12

Enter The Run You Want To Ball - 6

Run Scored By Bot - 4
Total Runs Scored - 16

Enter The Run You Want To Ball - 6

Run Scored By Bot - 0
Total Runs Scored - 16

Enter The Run You Want To Ball - 6

Run Scored By Bot - 3
Total Runs Scored - 19

Enter The Run You Want To Ball - 6

Run Scored By Bot - 3
Total Runs Scored - 22

Enter The Run You Want To Ball - 6

Run Scored By Bot - 6

Bot is Out
You Won The Match

Do You Want To Play The Game Once More ? (1-Yes Or 2-No) -
```

Now second inning begin
Again you have enter number
If enter number is same as random number innings end there
Else innings go on

If run scored in second inning is more than first inning then you second inning team won the match
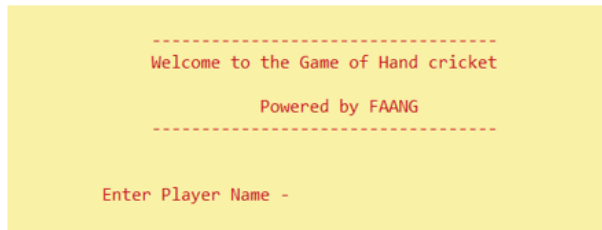Else
First inning team won the match

```
Bot is Out
You Won The Match

Do You Want To Play The Game Once More ? (1-Yes Or 2-No) -
```
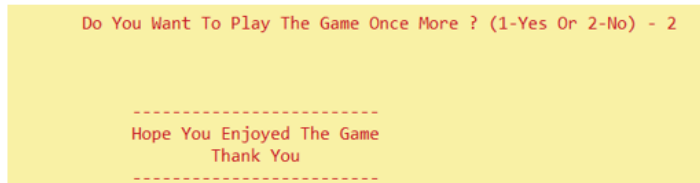
If you enter 1 then game will start again
Else application will end

After match is over Application will ask whether to play again or not

```
-------------------------------------
    Welcome to the Game of Hand cricket

            Powered by FAANG
-------------------------------------


    Enter Player Name -
```

After entering 1
Game begin once
again

```
Do You Want To Play The Game Once More ? (1-Yes Or 2-No) - 2


        -------------------------
        Hope You Enjoyed The Game
                Thank You
        -------------------------
```

After entering 2
Application will end
with sweet note

REFERENCES

- CodeChef
- JavaTpoint
- W3 School
- Greekworld
- Stack exchange
- GeeksforGeeks

COMPILER USED

- VS Code
- Code Blocks
- Code Chef
- GDB Online

Conclusion

Hand cricket is the major interest for many people since their childhood. Whenever we are alone, we can enjoy it with a computer during our free time and it will make our free time into fun time.

Here we used random function, nested if-else and many more for designing this program which makes it more interesting.

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THANK YOU