

# **THIRD UMPIRE REVIEW SYSTEM**

**(UCS503) Software Engineering Project**

**Software Requirements Specification**

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# 1. Introduction

## 1.1 Purpose:

The purpose of this SRS document is to provide a detailed overview of our software product, its parameters and goals. This document describes the project's target audience and its user interface, hardware and software requirements. It defines how our client, team and audience see the product and its future.

## 1.2 Scope:

One of the most treasured memory of a grown up child is to play gully cricket. There are always chance of having a fight on decisions during runout. So this project is a solution to this problem which uses python and provide a interface by which decision can be taken during the match of runout. The umpire can forward and reverse the video slowly and fastly which helps the him to check accurately the batsman position.

# 2. General Description

**2.1 Product perspective:** The product will run as a GUI on your window. The product does not require use of a keyboard but it require a mouse pad or pointing mouse. For example, by choosing the forward, previous image of match, umpire can give the result.



Figure 1: shows the layout for Home Page of DRS Screen.  
Here the user will have to forward or previous according to his view the direction of match



Figure 2: Shows the clip of match with forward and previous button

After checking the position of batsman, the umpire can give his decision.



Figure3: The decision window of umpire result

## 2.2 Product features:

1. It gives full control to the umpire to forward and backward the clip unlimited times.
2. It must be able to forward and backward the clip in fast and slow mode.
3. It prints all the buttons used by umpire in giving the decision in console window.
4. The software gives a Graphical user interface which provides a friendly environment for umpire
5. The software can be used by layman person also who doesn't know much about the technology

## 2.3 User class and characteristics:

The goal is to design software for gully cricket match as there are not accurate decision during runouts. So it can be used by Umpires and also for a layman language and also it can be used for other clip rather than match to forward and reverse with a small time stamp.

## 2.4 Constraints:

The following list presents the constraints, assumptions, dependencies or guidelines that are imposed upon implementation of Third Umpire Review System:

- The software has to be operated by hum as it can't give decision through itself
- It has an extremely small form factor and small screen.
- There are no memory requirements
- Response time for loading the software
- A general knowledge of basic computer skills is required
- If you are inactive for a minute then it closes automatically

## 2.5 Assumptions and dependencies:

A list of all assumptions that you have made regarding

- We loaded the clip of already played match, we don't use live match
- We assumed human has to be present behind the software
- The umpire can work on software without delay as window can be shut automatic

# 3. System Requirements

## 3.1 Functional requirements

Table 3 shows a template that I'll be using to describe functional requirements for umpire as he can easily deduce the functional requirements.

<b>Purpose</b>	This screen thus provides information specific to the decision made by umpire
<b>Inputs</b>	The match video clip
<b>Processing</b>	The umpire will forward and backward the video to check the batsman position
<b>Outputs</b>	This screen provides the decision of the umpire whether batsman out or not.

## 4.External Interface Requirements

### 4.1 User Interfaces

The logic behind the interactions between the users and the software by the GUI Window





The following list presents the other requirements:

- The product requires very limited graphics usage with just a simple mouse for choosing.
- The product does not require usage of sound or animation.
- The hardware and operating system requires a screen resolution not more than 320 x 240
- Sound is not an essential feature but it can be considered for future variants of

## 5. Non-Functional Requirements

### 5.1 Performance requirements

- The software is designed for the simple PC and Android.
- The software support only in a good working environment
- The software will run efficiently as all the match clips with the decision clips to be

### 5.2 Software quality attributes

The product is target towards layman person who don't knows much knowledge about software and can used efficiently. The product must load quickly and work well on a variety of terminals. It can be a great equipment for gully cricket matches.

### 5.3 Document Approvers

SRS for Third Umpire DRS  
approved by:

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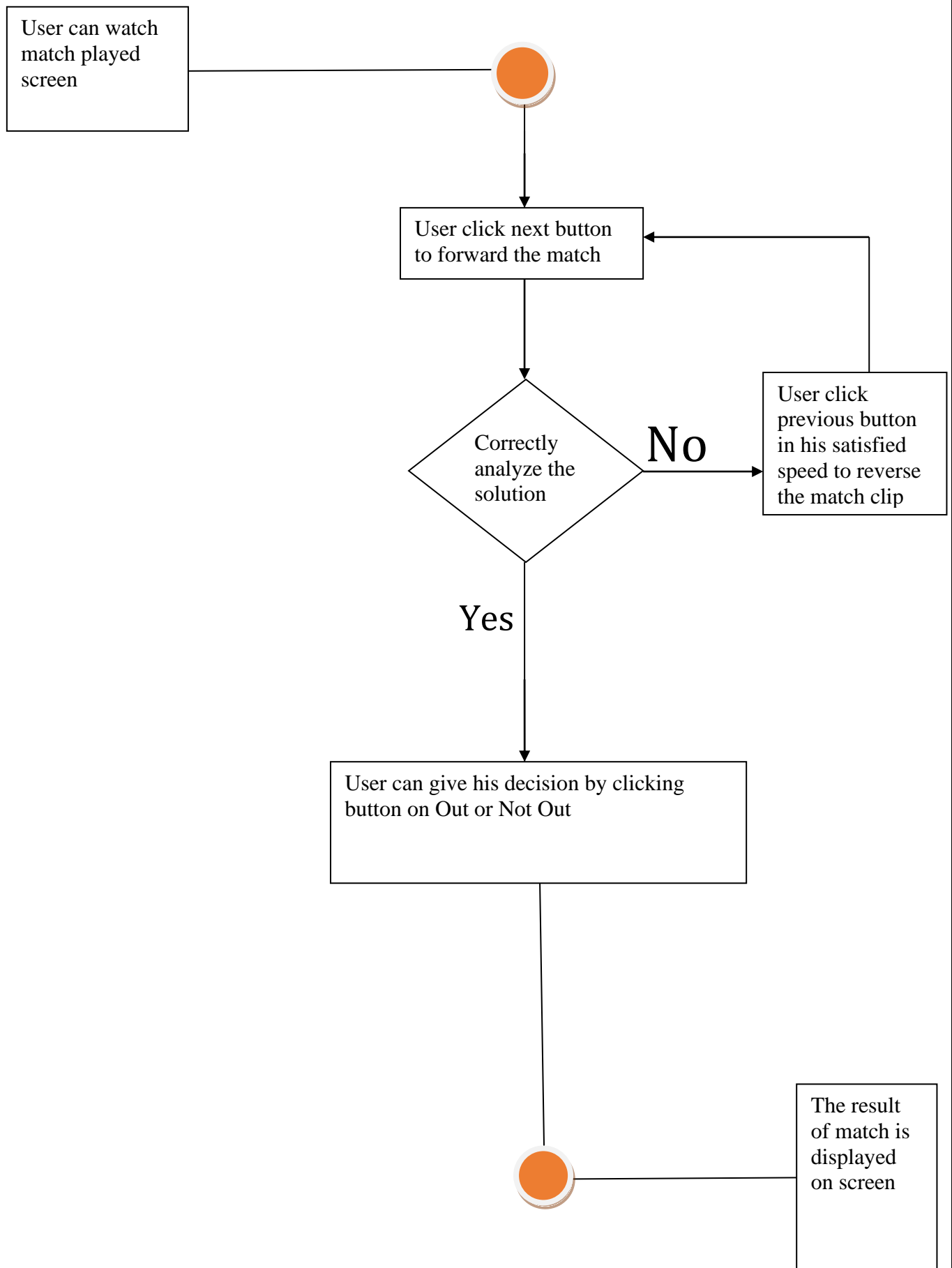
(name)

Designation

Date:

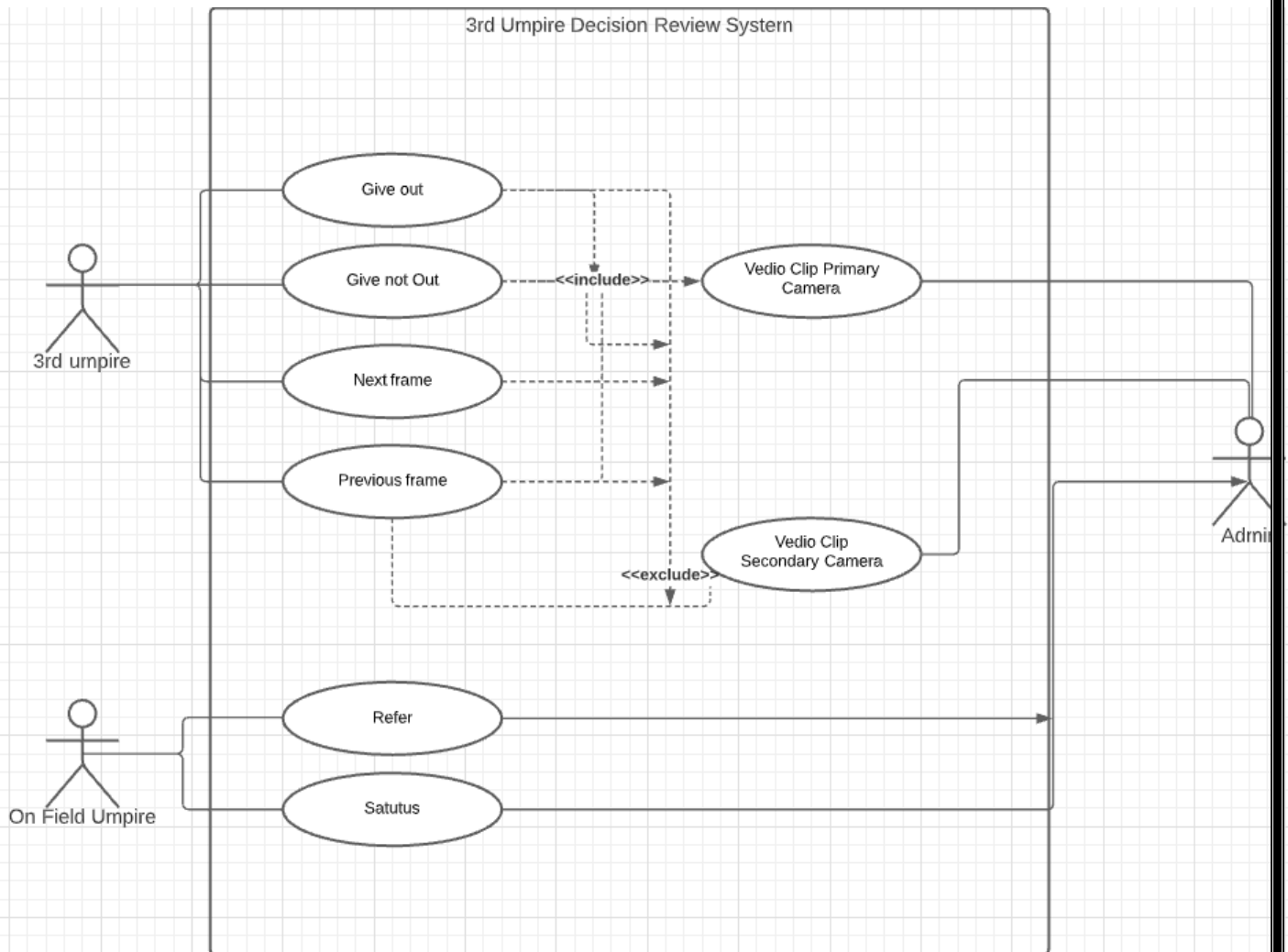


## 6.ACTIVITY DIAGRAM

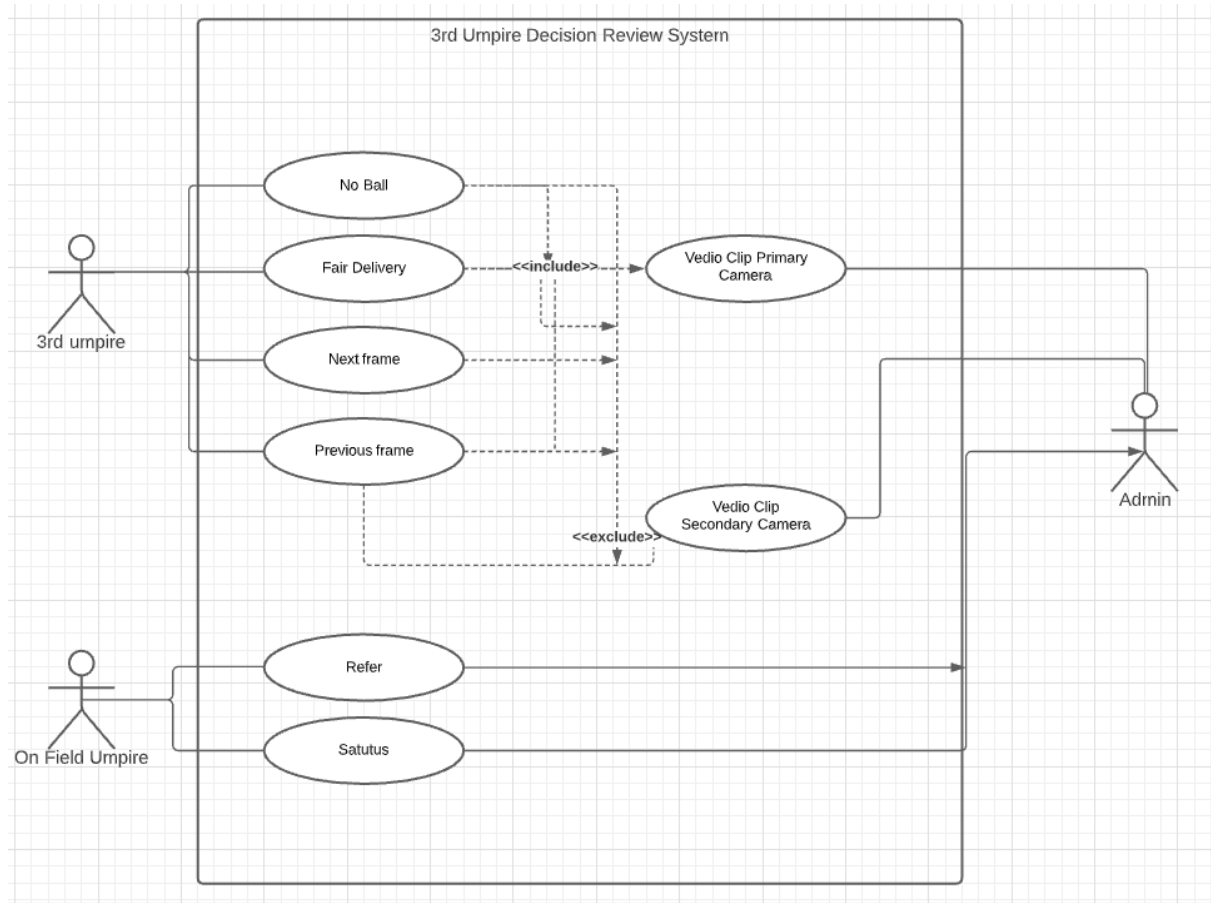


## 7.USE CASE DIAGRAM

### First use case

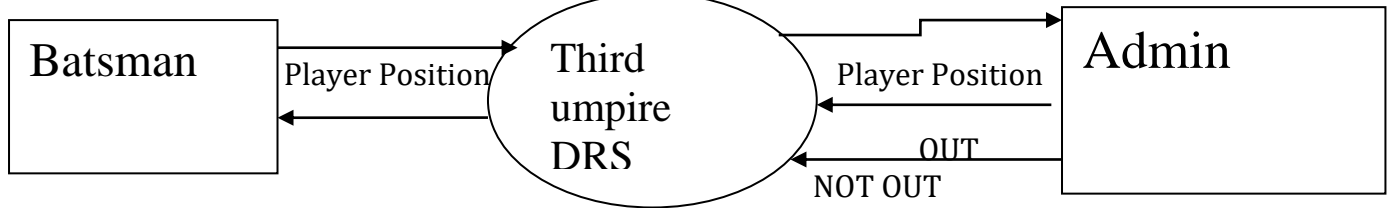


## second use case

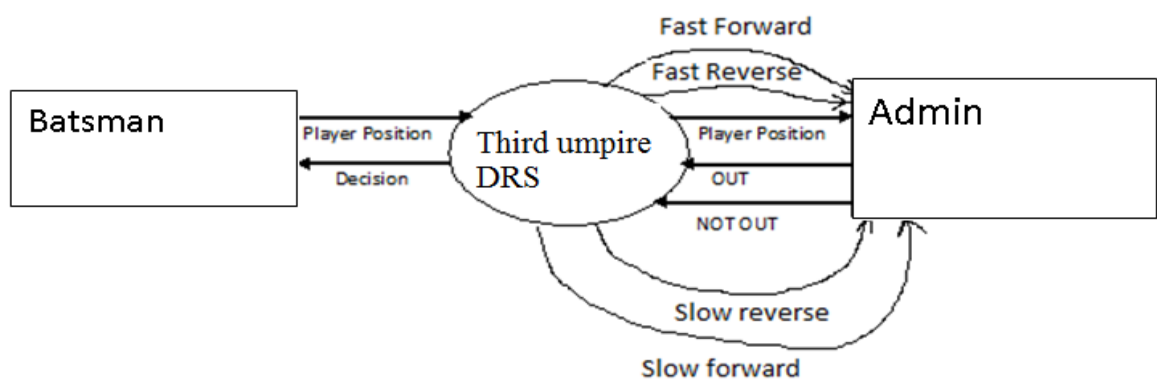


## 6.DATA FLOW DIAGRAM

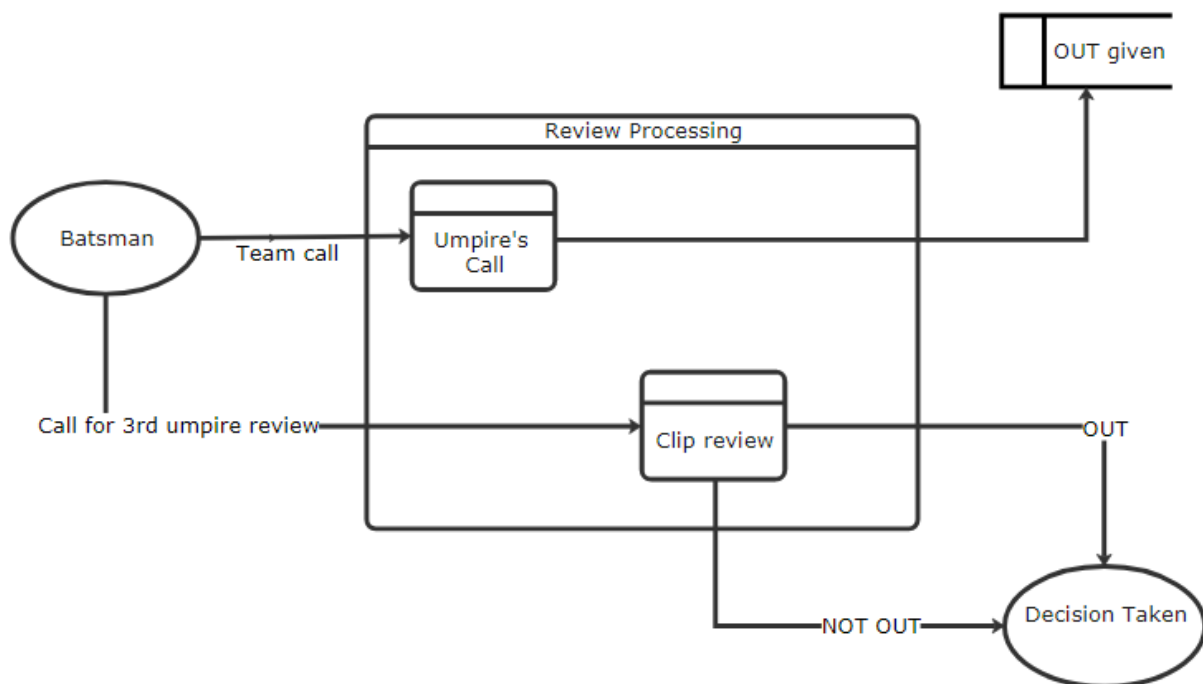
### DFD LEVEL 0



### DFD LEVEL 1



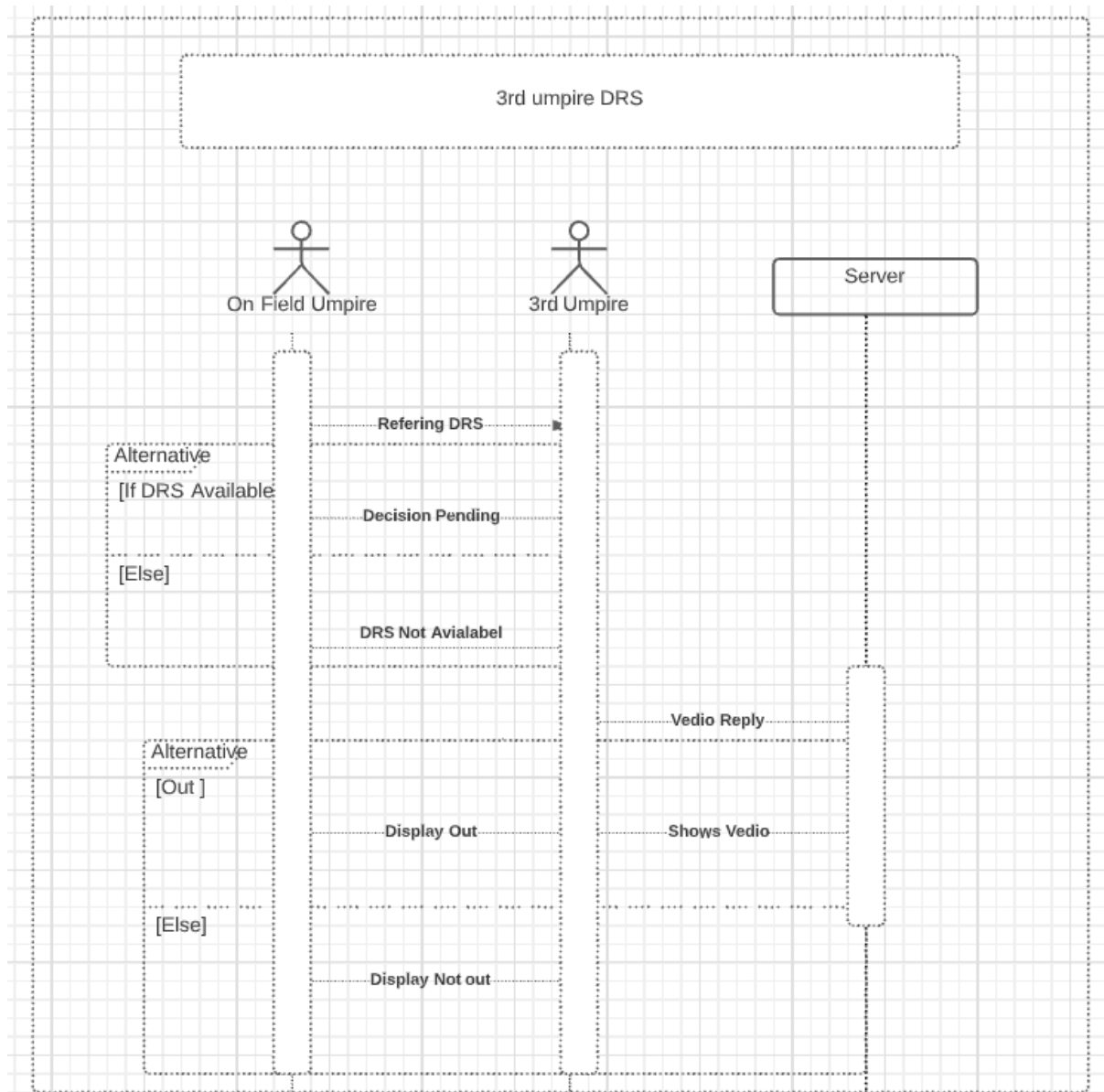
### DFD Level 2



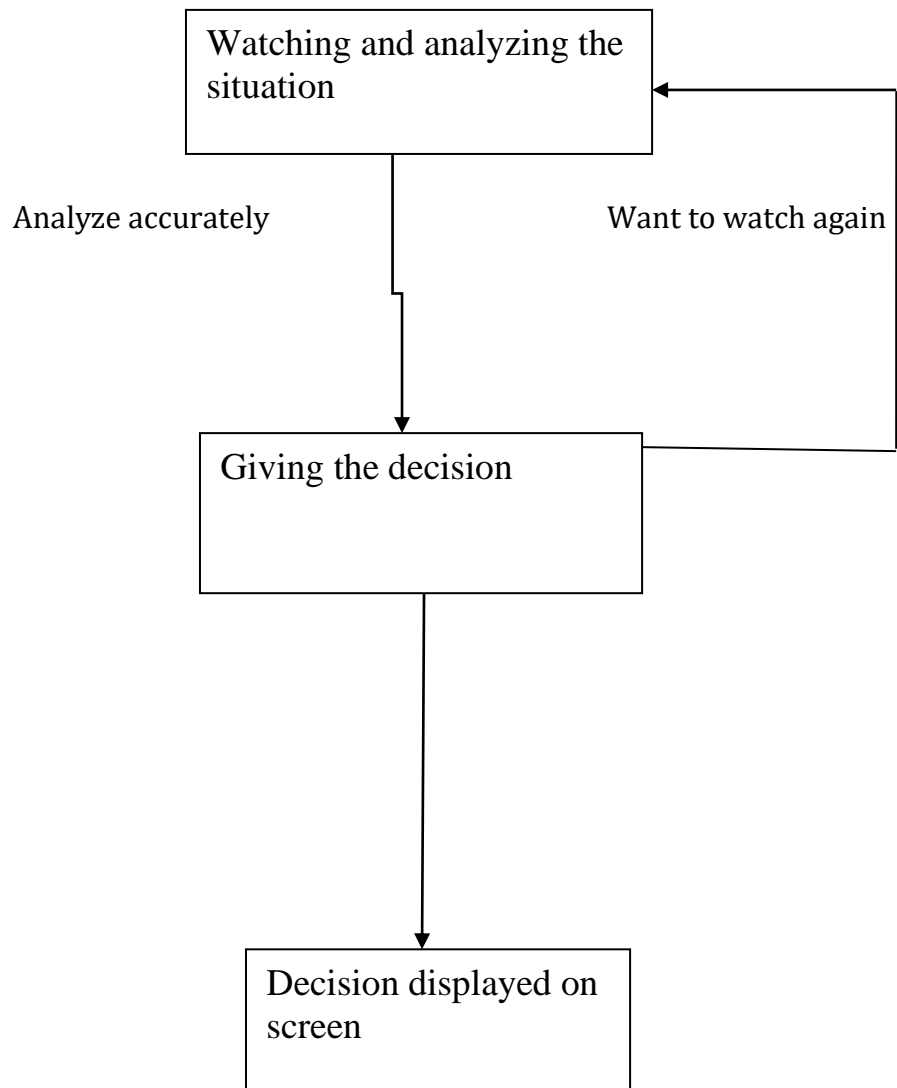
## 8.DATA DICTIONARY FOR DFD LEVEL1

S. No	DATA	DESCRIPTION	Input Source	Output Source
1	<Previous(fast)	Match clip will be used in fast speed to check the position	<<Previous(fast) is to be clicked	Playing Match clip be reversed in fast mode
2	Previous(slow)	Match clip will be used in slow speed to check the position	<<Previous(slow) is to be clicked	Playing Match clip be reversed in slow mode
3	Next(fast)>>	Match clip will be forwarded in fast to check the position	The Next(fast)>> is to be clicked	Playing Match clip be forwarded in fast mode
4	Next(slow)>>	Match clip will be forwarded in slow to check the position	The Button is Next(slow)>> to be clicked	Playing Match clip be forwarded in slow mode
5	Give Out	The position of man is out then it will be pressed to play the decision	The Give Out is to be clicked	Out decision will be displayed on Screen
6	Give Not Out	The position of man is not-out then it will be pressed to play the decision	The Give Not Out is to be clicked	Not-Out decision will be displayed on screen

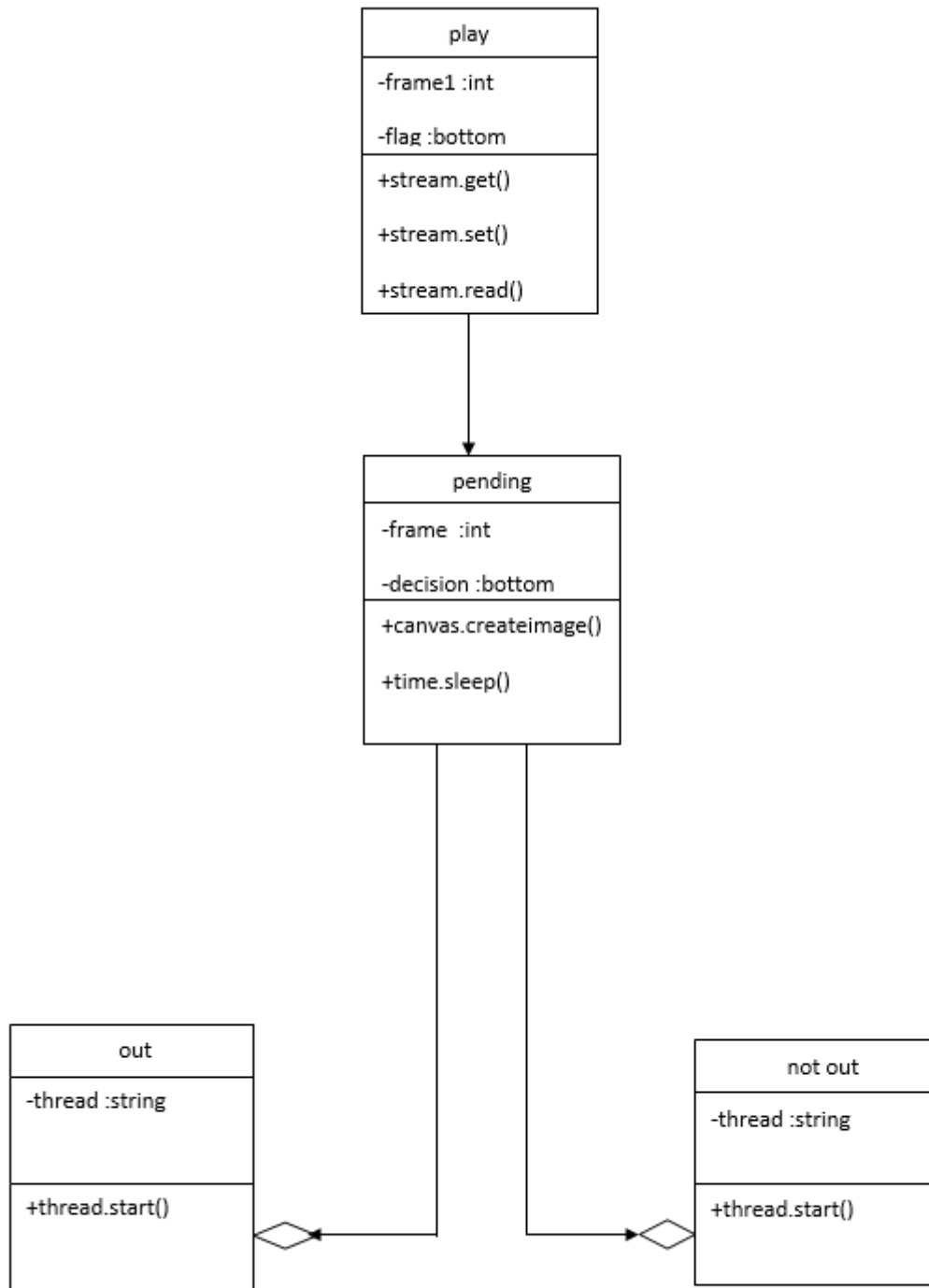
## 9.SEQUENCE DIAGRAM



## 10.STATE DIAGRAM

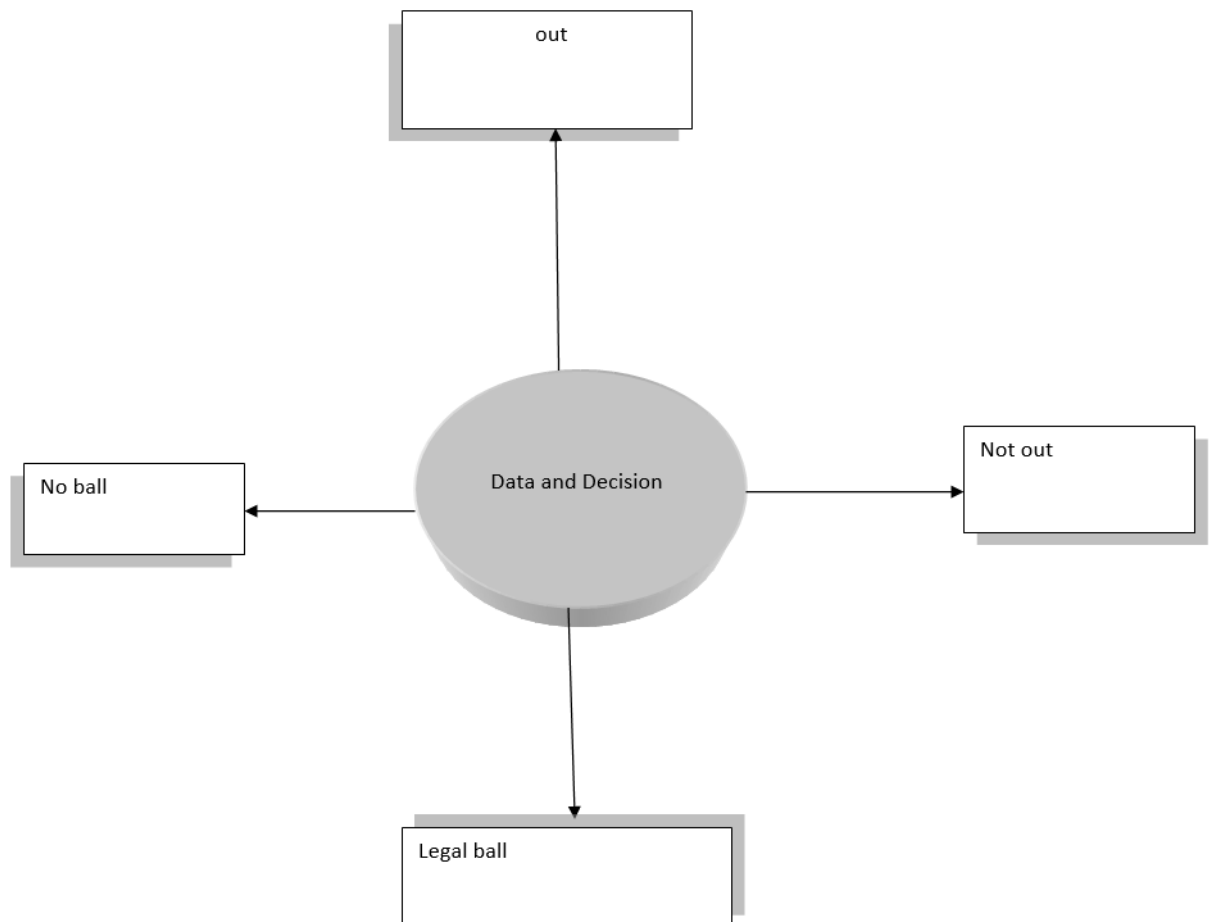


## 11. Class DIAGRAM

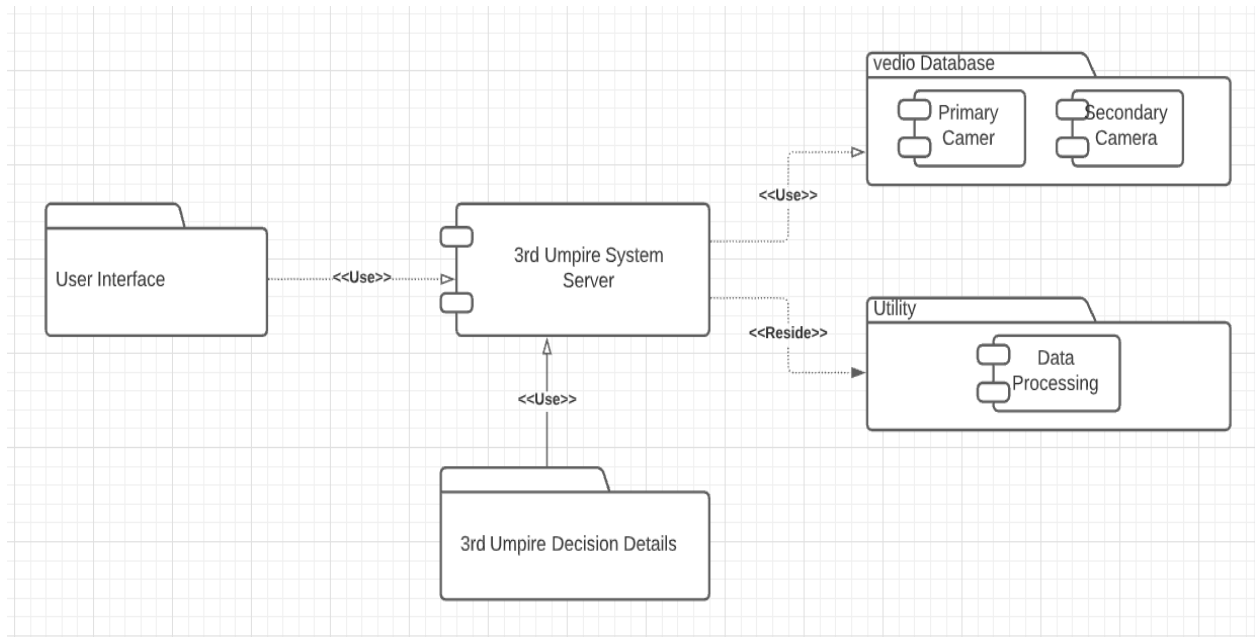




## 12.Architecture Style



## 13.Component Design



## 13.References

<https://docs.python.org/3/library/tk.html#:~:text=The%20tkinter%20package%20is%20a%20thin%20objectoriented%20layer,that%20implement%20the%20Tk%20widgets%20as%20Python%20classes.>