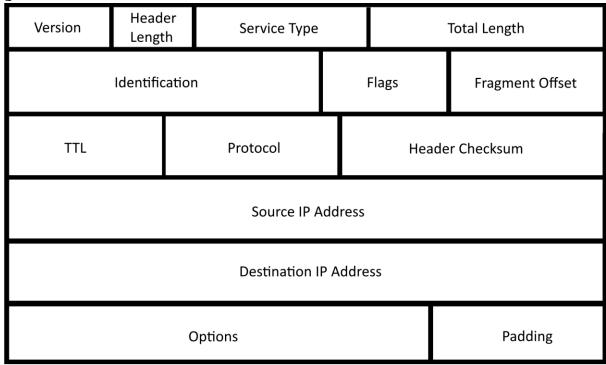
Online Gaming

Lab₂

3. IP Header



```
Internet Protocol Version 4, Src: 149.153.106.120, Dst: 149.153.159.101
  0100 .... = Version: 4
    .... 0101 = Header Length: 20 bytes (5)

> Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)
  Total Length: 846
  Identification: 0x7fe5 (32741)

> Flags: 0x4000, Don't fragment
  Fragment offset: 0
  Time to live: 128
  Protocol: TCP (6)
  Header checksum: 0x0000 [validation disabled]
  [Header checksum status: Unverified]
  Source: 149.153.106.120
```

Destination: 149.153.159.101

4. Explain packet fields

- Time
 - o Time took to retrieve and capture the packet.
 - Used to see the retrieval time.
- Source
 - o The IP address from which the packet was sent.
 - Used to identify the source of the packet.
- Destination
 - The IP address that will receive the packet.
 - Used to identify where to send the packet.
- Protocol
 - The protocol is the set of rules that the IP address follows.
 - Used so that the packet can follow the protocol of the network.
- Length
 - o The size of the packet.
- Info
 - o Some information about the contents of the packet.

5. Difference between packets

- Each packet is numbered.
- It uses protocols that differ from the packets I captured.
- The IP address that it uses are internal testing IP's.
- It now has information for the fragment field.
- There is a server ping that requests to see if the server is active and the server reply's with an answer to this request.

6. Technical/Design Highlights of Games.

- 6.1. Dark Souls
- Creates a new technical system that is known and replicated for its difficult combat system.
- 6.2. Genshin Impact
- The layout of the open world is very innovative and looks graphically amazing. As well as this it incorporates a 'gatcha' mechanic, for obtaining in-game items and characters, into an open world RPG game, which is relatively new based on the games scale. This seems like a very successful free to play model.
- 6.3. The Witcher 3: The Wild Hunt
- Is extremely good in many ways. The main thing that it is know for is its amazing and large open-world, the quest system and combat with enemies.