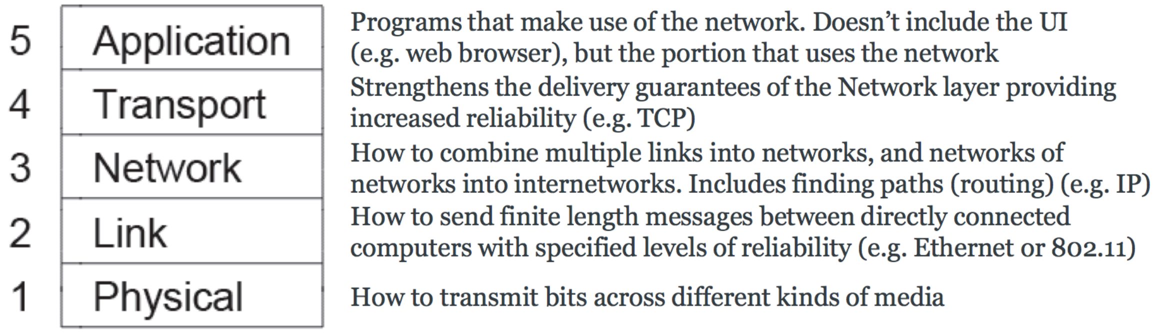
Team B1 – Network Structure

Reference model:



5	Application	Programs that make use of the network. Doesn't include the UI (e.g. web browser), but the portion that uses the network
4	Transport	Strengthens the delivery guarantees of the Network layer providing increased reliability (e.g. TCP)
3	Network	How to combine multiple links into networks, and networks of networks into internetworks. Includes finding paths (routing) (e.g. IP)
2	Link	How to send finite length messages between directly connected computers with specified levels of reliability (e.g. Ethernet or 802.11)
1	Physical	How to transmit bits across different kinds of media

Application – All of us

What we have already:

- Mostly working physical layer (needs bugs fixing)

Possible Proposal:

- Application layer offers the UI (possibly a terminal on a computer) "to" and "message" fields
- Transport layer is similar to TCP (i.e., connection based) puts application data in to segments:
  - Implements handshaking
  - Checksums
  - Data integrity (e.g., Re-transmission of dropped packets)
- Network layer provides message routing, puts segments in to packets:
  - Routing tables etc
  - Knows which il mattos are connected to other ones
- Link layer deals with the connection and puts packets in to frames:
  - Data arriving in the correct order
  - Do we need to split in to LLC and MAC?
  - Acknowledged (similar to WiFi)
- Physical layer – just worries about the transmission of the data across the medium (mostly working already)

What we need to do:

- Choose what layers we need
- Decide functionality of each of our layers (and agree with team B2)
- Divide up the layers between us
- Decide on function prototypes for the services each layer will offer
- Do the shit tonne of work we'll then have.
- Win all the marks