

CTSS facts

10/25/68

- a. 30 users produce 24 interactions / minute
- b. each interaction uses on average of 1.8 sec computation { 0.9 execution
 + 0.9 sec disk or drum sweep time. { 0.9 waiting for disks
- c. each interaction causes 1 k of machine conditions 53
 8 k (average) of user program ↑ (Using 55 → out of each 60 seconds)

to go in and out, and

4 k of user data

to go in (or out) from disk. (implies ~ 1k of directory manipulation traffic)

- d. Average interaction rate is one each 72 seconds -
 Average think time is $\frac{34}{72}$ seconds.
 Average delay is $\rightarrow 38$ seconds

- e. Note that median program size is < 1k
median run time is < .5 sec,

meaning that CTSS response ^{maybe} felt good because one 1/2 are getting very good response, remainder are getting very bad response.

- f. User's 1.8 seconds are divided ~ 900 us computation + 900 us looping on disk input.
 Computation includes ~ 10 supervisory calls per disk io at 4 us each
 = 40 us.
 User performs 860 us computation only.