

D-BAUG Informatik I

Exercise session: week 13

HS 2018

Homework

- Questions?

Use case

T9 Directory



Once upon a time...

before smartphones, phones only featured a key layout as this



Typing messages = repeat a number to get to second or third letter mapped on a number. Example: to enter 'hallo':the user must press 4, 4, 2, 5, 5, 5, then pause, then 5, 5, 5, 6, 6 and finally another 6.

Entering text was a *slow and cumbersome* process. To speed it up, *T9* was invented.

T9

Predictive Text (aka T9): system to reduce the number of key presses necessary to enter text. Instead of pressing a number multiple times to reach some letters the user has to only press the number once.

Example: `h a l l o` will be mapped to the combination 4,2,5,5,6.

Problem: mapping is not unique. Example: `'g c j k m' = 'h e l l o' = 4,2,5,5,6.`

Solution: show words¹ that map to the same combination and then cycle through them using the * button.

¹ordered by likelihood of appearance

Idea

Number \rightarrow word mapping in a tree of order 8:

