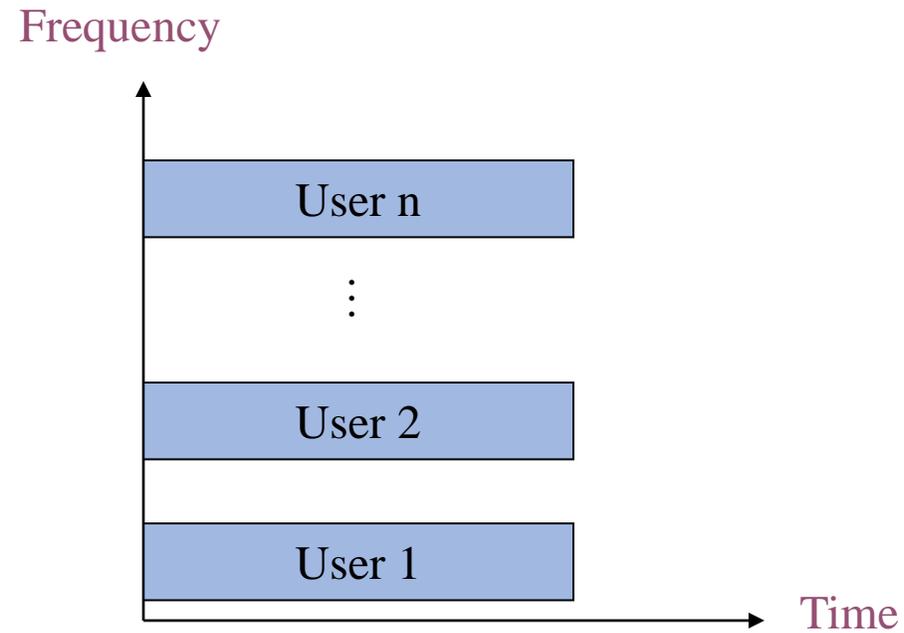


Multiple Access Techniques

Outline

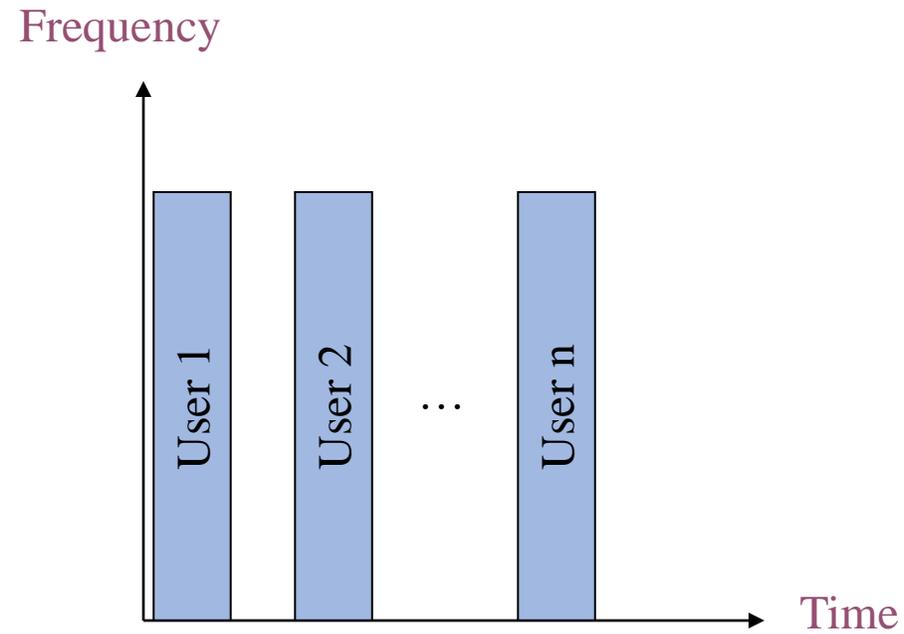
- Frequency Division Multiple Access (FDMA)
- Time Division Multiple Access (TDMA)
- Code Division Multiple Access (CDMA)
- Comparison of FDMA, TDMA, and CDMA

Frequency Division Multiple Access (FDMA)



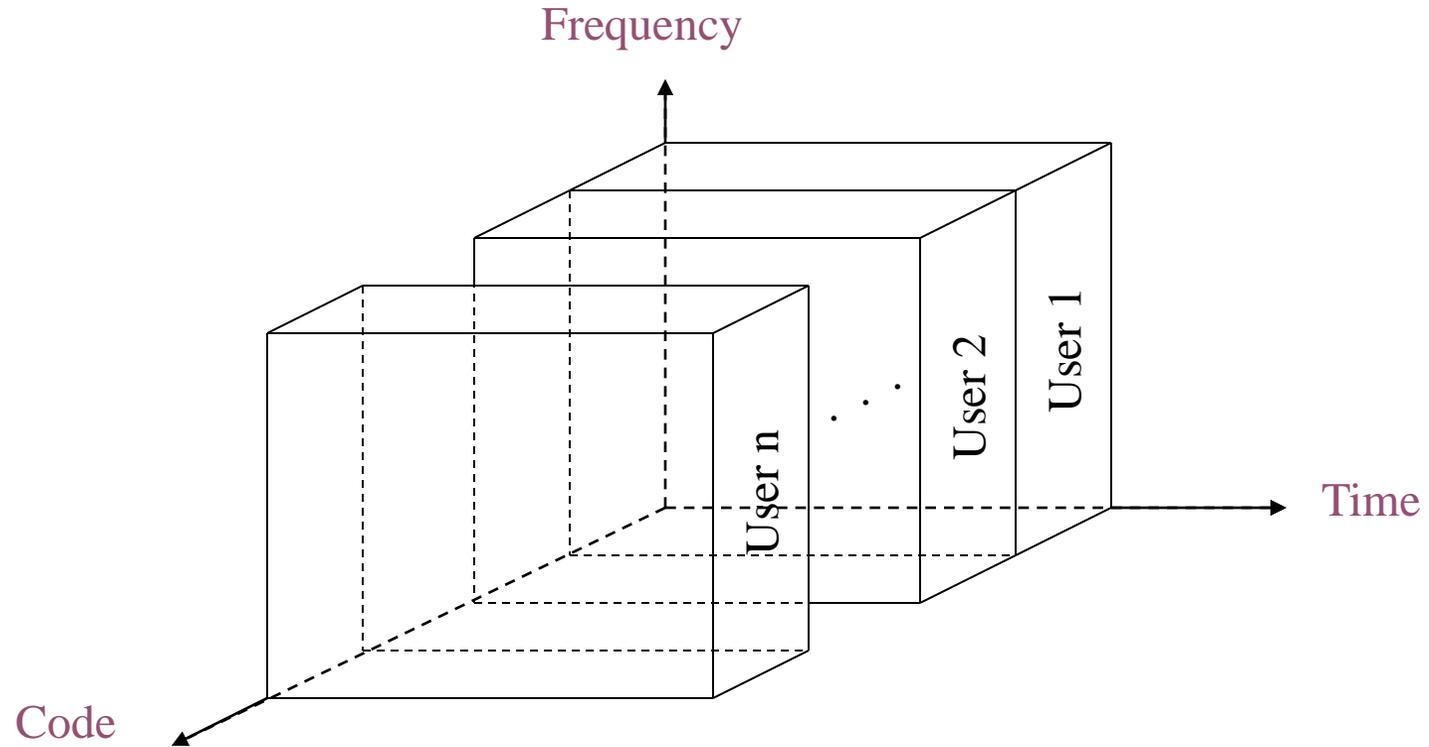
- Single channel per carrier
- All first generation systems use FDMA

Time Division Multiple Access (TDMA)



- Multiple channels per carrier
- Most of second generation systems use TDMA

Code Division Multiple Access (CDMA)



- Users share bandwidth by using code sequences that are orthogonal to each other
- Some second generation systems use CDMA
- Most of third generation systems use CDMA