

WiMAC Bootcamp Week 3: Assignments

WiMAC Team

Assignment 1-1: Array

- Suppose the packet header is of the following format
 - 1-4 byte: IPv4 address
 - 5-8 byte: timestamp of the packet
 - 9-10 byte: payload size
 - Payload is of size uniformly distributed between 50-100 bytes
 - Payload is generated by a random number generator
- 1. How to create a packet of the above format? ([Hint](#): use array)
- 2. How to create a periodic arrival process with period = 100ms?
 - Use the packet format mentioned above
 - [Hint](#): use “while loop” and “wait”

IPv4 address (4 bytes)	Timestamp (4 bytes)	Payload size (2 bytes)	Payload (50-100 bytes)
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Assignment 1-2: Packet Header

- Please find out the Host packet header format used in 802.11 Application Framework and explain
 - What are the fields in packet header?
 - Why are those fields necessary?
- Please summarize your findings in a short report (PDF, Documents, or Slides)
- **Hint:** Check 802.11 Application Framework White Paper
 - <http://www.ni.com/white-paper/53279/en/>

Assignment 2: Cluster and Type Definition

- Please find out all the “clusters” and “type definitions” used in 802.11 Application Framework and explain
 - Where are the clusters and type definitions?
 - What are these clusters and type definitions for?
- Please summarize your findings in a short report (PDF, Documents, or Slides)