**Mail Server Task Specification Doc**

**Students**

|  |  |  |  |
| --- | --- | --- | --- |
| **First Name** | **Last Name** | **TAU Username** | **ID** |
| Liron | Gazit | lironemilyg | 305774382 |
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## Server Side Protocol

## 1. Authentication

Authenticate the user with the system and obtain the auth\_token

## Input Message

|  |  |
| --- | --- |
| **Type** | **Data** |
| **String** | [opCode][data\_size][username\_value][tab][password\_value] “00013john do” |

## Data Values

|  |  |  |
| --- | --- | --- |
| **Name** | **Size** | **Value** |
| opCode  Size  username  Delimiter  password | Byte  4 x Bytes Dynamic 4 x Bytes Dynamic | 1 Size of total data received Client username value needed to authenticate TAB(’\t’) Separator between values Client password value needed to authenticate |

## Response

|  |  |
| --- | --- |
| **Type** | **Response** |
| String  String | “Connected to server”  “failed to connect to server” |

## 

## 2. SHOW INBOX

Get the new updates

## Input Message

|  |  |
| --- | --- |
| **Type** | **Data** |
| **String** | [opCode][data\_size] “10006” |

## Data Values

|  |  |  |
| --- | --- | --- |
| **Name** | **Size** | **Value** |
| opCode  Size | Byte  4 x Bytes | 1 Size of total data received |

## Response

|  |  |
| --- | --- |
| **Type** | **Response** |
| String  String | All Mails Inbox relative to the connected user  “No Mails to show in Inbox” |

## 3. GET MAIL

## Input Message

|  |  |
| --- | --- |
| **Type** | **Data** |
| **String** | [opCode][data\_size][mail\_id] “200105” |

## Data Values

|  |  |  |
| --- | --- | --- |
| **Name** | **Size** | **Value** |
| opCode  Size  mail\_id | Byte  4 x Bytes dynamic | 1 Size of total data received Id of connected user specific mail |

## Response

|  |  |
| --- | --- |
| **Type** | **Response** |
| String String | The requested mail Content  “The requested mail does not exist in DB” |

## 4. DELETE MAIL

## Input Message

|  |  |
| --- | --- |
| **Type** | **Data** |
| **String** | [opCode][data\_size][mail\_id] “3john do” |

## Data Values

|  |  |  |
| --- | --- | --- |
| **Name** | **Size** | **Value** |
| opCode  Size  mail\_id | Byte  4 x Bytes dynamic | 1 Size of total data received Id of connected user specific mail |

## Response

|  |  |
| --- | --- |
| **Type** | **Response** |
|  | No response from server |

## 5. COMPOSE

## Input Message

|  |  |
| --- | --- |
| **Type** | **Data** |
| **String** | [opCode][size][username\_value][tab][password\_value] “40100To: user1,user2\nSubject: someSubject\nText:someContent\n” |

## Data Values

|  |  |  |
| --- | --- | --- |
| **Name** | **Size** | **Value** |
| opCode  Size  mail\_id | Byte  4 x Bytes dynamic | 1 Size of total data received Id of connected user specific mail |

## Response

|  |  |
| --- | --- |
| **Type** | **Response** |
|  | No response from server |

## 4. QUIT

## Input Message

|  |  |
| --- | --- |
| **Type** | **Data** |
| **String** | [opCode][size][username\_value][tab][password\_value] “50005” |

## Data Values

|  |  |  |
| --- | --- | --- |
| **Name** | **Size** | **Value** |
| opCode | Byte | 5 |

## Response

|  |  |
| --- | --- |
| **Type** | **Response** |
|  | No response from server |

Glossary

## Conventions

* **Client** - Client application Implements the above Protocol
* **Status** - Failure or Successful operation.
* **Response** - String data sent from server to client application.
* Server Cannot Start without a given users.txt file argument.
* All responses are in String format.
* Default Port - 6423.
* Server Can run with customized port - given as second argument.
* Maximum number of clients - 20.
* Maximum mail recipients - 20.
* Maximum Mails in Database - 32,000.
* Maximum Username and Password length - 50 characters.
* Maximum Subject length - 100 characters.
* Maximum Content length - 2000 characters.