



**DOKUZ EYLUL UNIVERSITY**  
**ENGINEERING FACULTY**  
**DEPARTMENT OF COMPUTER ENGINEERING**



**CME 2201 DATA STRUCTURES**  
**ASSIGNMENT-I FINAL REPORT**

**ASSIGNMENT-I**

**By**  
**Osman MUTLU**

**Lecturers**  
**Assoc.Prof. Zerrin IŞIK**

# **CHAPTER ONE**

## **INTRODUCTION**

The purpose of this report is to evaluate what has been done about assignment1 until the final evaluation process and to indicate what has been done by the deadline. The start date of the assignment is 19 November and the end date is 5 December. The assignment duration is 3 weeks. The goal of the assignment is to read the given file and to store each different data in the hashtable data type that we create and to calculate the performance of the operations within the required conditions.

## **CHAPTER TWO**

### **PROJECT DESCRIPTION**

In the assignment1, our text files stored in directory is name of “BBC”, where the necessary operations are performed, places it in a hash table of the hashtable data type we have prepared. The hash value you want to place is calculated to place it in the hashtable. The calculated value is taken according to the table size and put into the indexes that come out homogeneously without any collision. The hash calculation method and the occupancy rate selected by the user are used while performing the putting process. The search.txt file is read and the times to find the words in the hashtable of the words in this file are calculated as minimum, maximum and average time values.

## CHAPTER THREE

### PROGRESS SUMMARY

Task/Date	Week One	Week Two	Week Three
Design of classes	X		
Creating necessary variables/data structures.	X		
Reading word files.	X		
Creating put function		X	
Creating get function		X	
Creating search function			X
Time calculation.			X
Proccess			X
Final report			X

## Chapter four

### Performans Monitoring

Load Factor	Hashing Algorithim	Collision Type	Collision Count	Indexing Time	Avg. Search Time	Min. Search Time	Max. Search Time
A = 50%	SSF	LP	27341	3162753300	227378	300	26128400
		DH	27292	8094538300	38530	200	3978100
	PAF	LP	10451	318872700	181791	200	4851900
		DH	10480	504634400	156054	200	1832700
A = 80%	SSF	LP	27341	3541025300	165399	300	5995100
		DH	27317	7804857800	15893	100	987600
	PAF	LP	15766	905090700	266162	300	4145700
		DH	15782	1676961400	231699	200	8216700