#### WORKLORD

PROJECT REPORT

Submitted by

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to

the APJ Abdul Kalam Technological University in partial fulfillment of the requirements for the award of the Degree

of

Master of Computer Applications



**Department of Management Studies Computer Applications** 

KMCT College of Engineering
Kallanthode, NITC P.O, Kozhikode-673601

**AUGUST 2020** 

#### **DECLARATION**

I undersigned here by declare that the project report "WORKLORD", submitted for partial fulfillment of the requirements for the award of degree of Master of Computer Applications of the APJ Abdul Kalam Technological University, Kerala is a bonafide work done by me under supervision of Mr. Ajayakumar K K. This submission represents my ideas in my own words and where ideas or words of others have been included, I have adequately and accurately cited and referenced the original sources. I also declare that I have adhered to ethics of academic honesty and integrity and have not misrepresented or fabricated any data or idea or fact or source in my submission. I understand that any violation of the above will be a cause for disciplinary action by the institute and/or the University and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been obtained. This report has not been previously formed the basis for the award of any degree.

Place: Kallanthode	ANJUSHA BJ
Date:	Signature
	MOHAMMED ALTHAF T
	Signature

#### DEPARTMENT OF MANAGEMENT STUDIES & COMPUTER APPLICATIONS

#### KMCT COLLEGE OF ENGINEERING

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#### **CERTIFICATE**

This is to certify that the report entitled WORKLORD submitted by MOHAMMED ALTHAF T (LKMC18MCA026), ANJUSHA BJ (KMC18MCA002)to the APJ Abdul Kalam Technological University in partial fulfillment of the requirements for the award of the Degree of Master of Computer Applications is a bonafide record of the project work carried out by him under our guidance and supervision. This report in any form has not been submitted to any other University or Institute for any purpose.

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#### **ACKNOWLEDGEMENT**

I would like to take this opportunity to extend my sincere thanks to people who helped me to make this project possible. This project will be incomplete without mentioning all the people who helped me to make it real.

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Above all I thank God, the almighty for his grace without which it would not have been possible to complete this work in time.

Place: Kallanthode			
Date:			

#### **ABSTRACT**

Technology has changed the way job seekers search for jobs and employers find qualified employees. While employers still advertise job openings through traditional advertising mediums, today employers and job seekers turn to online job portals to find employment matches. Job seekers can advertise their skills and search for available positions and employers can announce employment openings through job portals.

The proposed system "WORK LORD" is a web based application to give the job seekers a platform for finding right and satisfactory job according to their qualification and skills. It also connect the job seekers with the major companies. This application is mainly focused on the applicants, who are seeking jobs in CS (Computer Science) field. Job seekers can register themselves with resume at the website where as the employers register in the website and put job vacancies at their company. Employers can also browse through the posted resumes and user performance. The system provides jobs catalogue and information to members. The Admin and employers can keep the catalogue updated all the time so that the job seekers get the updated information all the time.

There are many job portals that claims to provide you the best job, but none of them address the issues faced by the job seekers. They face issues because of work experience, because Companies give more priority for experienced job seekers. And they are not calculating the skill level of the job seekers. In this project we provide the Job Seeker to express their skills by completing the tests provided by admin which helps employer to understand their skills in their fields easily. Also they will be getting tasks to complete for measuring their performance. Most scored/skilled persons will be highlighted top and gets faster job opportunities such as preferred employer, preferred technology should be there. Calculating skills will be a great option for freshers to seek jobs. The issues faced by freshers can solved by implementing these features in the web application. The priority based oppertunities can be avoided by this. In our project we will be focusing on changing such attitude towards freshers.

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## Chapter 1

### INTRODUCTION

The quality of people hired for a specific job is usually the key issue when measuring the effectiveness of the employment. However, in certain circumstances the speed of hiring is also an issue and also contribute to quality hiring. The rationale of a hiring process is to stretch out to potential employees and bring out the specific kind of required skills and experiences in the field organization. Online job portal system is fundamental in removal of paper works and introduction of workflow systems that connect job seekers and employers. At a very low cost, the internet offers employers and job searchers access to detailed and up-to-date information about job vacancies in different locations around the world.

WORKLORD project is aimed at developing a job portal friendly for non-experienced and experienced job seekers. The system project is an online web application which can be accessed from anywhere only with a proper login verification. Job seekers should be able to login and upload their resume and update their contact details. There are many job portals that claims to provide you the best job, but none of them address the real issues faced by the non-experienced job seekers. Companies give higher priority for experienced job seekers. They failes calculate the skill level of the job seekers.

In this project we insist the Job Seeker to complete specific tests provided by the admin which helps employer to understand job seeker's skills and performance in their fields. Also they will be getting tasks to express their performance and efficiency. Most scored/skilled persons will be getting more priorities, Options such as top scored candidate, preferred employer, preferred technology should be there. Calculating skills will be a great option for freshers to seek jobs. The issues faced by the new job seekers to find a perfect job with their skills is difficult. In our project we will try to change such attitude from companies towards freshers. This system gives the company to search for the best candidate available on the fields.

## Chapter 2

### LITERATURE SURVEY

### 2.0.1 Job Procurement

Old and New Ways Job seeking usually involves different ways to look for jobs such as through personal contacts, direct telephone calls to employers, job agency office, scanning online job listings etc. Before the Internet, became widely uses as a method of seeking jobs, jobseekers spent a lot of time using various methods to look for job openings. Today, jobseekers use online methods which are very convenient and save a lot of time. Eleanna Galanaki lists the following methods to be the traditional (old) ways for recruitment:

- Employment recruitment agencies
- Job fairs
- Advertising in the mass media such as newspapers
- Advertisement in television and radio
- Management Consultants
- Existing employee contacts
- Schools colleges or universities students services department
- Workers or professional referrals

These old job seeking methods are too slow, stressful, challenging and also lack quality. In addition, the applicants have to consider the cost and the amount of time to get the information they need, and other preparations they have to make. Finding all available job vacancies is a main step at in the job-seeking process. The Internet is now a powerful tool that jobseekers can use. Today, there are many sites that advertise job positions to be filled by people with certain skills in various fields. The Internet plays an important role in the area of human resource planning and development. Most organizations are now using computer technology and the Internet for staff recruitment. Although the Internet has facilitated the process of job-seeking, it has not replaced the traditional methods, completely.

### 2.0.2 Importance of Job Portals

In the age of technology, the Internet has become the main source of information for jobseekers. Large corporations, institutions, and universities include information on career prospects on their websites. According to a survey, 70% of the workforce uses websites or portals on the Internet to search for jobs in France. These websites or portals provide a search engine to access information on job opportunities. The most employers are keen to use online recruitment methods of getting staff. It mentions that the online recruitment methods have the ability to identify the best applicants. That is the reason why more developed countries such as Malaysia have started to use online job portal as one of the important way to recruit people to fill job vacancies. A study done in 2006, found that 21% of internet users in the EU used the web to search for jobs or to send job applications. In 2007, this had increased to 67% for unemployed people.

#### 2.0.3 Features of Job Portals

One of the ways to improve employment mobility is to provide online job offer services. Online job portals can help jobseekers as they contain all required information about available vacancies in a single point. Such portals enhance efficiency in job recruitment as applicants can match their qualifications and skills to the requirements of employers. Generally, searching for jobs on the internet involves a process of information collecting because the job seeker gathers information contained in the job portals, during the search. A good job portal shares information and experiences with its members/users. This save time and efforts and better decisions can be made. Job openings requirements can be matched to an applicant's qualification and skills. In this way, job portals return not only the precise matches but also return the most similar match. The members of the European Commission (EC) stated that online job portals should have quite similar characteristics that include an online searchable database of positions for job searcher, facilities to send CVs to the website, email alerts of jobs which match the users profile, extra instruction, for example, about working in foreign countries or career guidance, the capability to manage job applications, employers must have the ability to publish and manage job positions, search the CV database, and have online contact with potential jobseekers.

#### 2.0.4 References

- M. Mansourvar and N. Y. Mohd, "Web portal as a knowledge management system in the universities," World Academy of Science, Engineering and Technology, 2010.
- S. Mauno, U. Kinnunen, and M. Ruokolainen, "Job demands and resources as antecedents of work engagement: A longitudinal study," Journal of Vocational Behavior, 2007.
- A. Doyle, Internet Your Way to a New Job: How to Really Find a Job Online, Happy about, 2008.
- N. Sulaiman and M. Burke, "A case analysis of knowledge sharing implementation and job searching in Malaysia," International Journal of Information Management, 2009.
- M. Mansourvar, Development of a Job Web Portal to Capture Industry's Needs, 2011.
- M. Mansourvar and N. B. M. Yasin, "Knowledge portal: a tool to capture university requirements," in Proc. 2011 International Conf. on Graphic and Image Processing, International Society for Optics and Photonics, October 2011.

## **Chapter 3**

### SYSTEM ANALYSIS

### 3.1 Existing system

The traditional hiring of employees starts with the processing of application forms, describe the job for each position, verify application forms and lastly evaluate the best person for the job. The whole process from advertisement to hiring a quality applicant takes a lot of time, effort and also has more weakness. The advertisement itself is costly especially when done through print media. therefore, the publication of the job adverts will only last for a very short time and in that case few people will have seen the job vacancy. Thus, the traditional recruitment process is not be the best in today's competitive job market.

The question here is how this could be made efficient and possible. This question or problem solved by an online job portal system which is set to transform the way in which companies and other employers recruit their employees. The Job seeker Functions concentrates on the consistent information that is practically, part of the organizational activities and which needs proper authentication for the data collection. The users can perform some tasks without registering or without entering into the application. He can search for the jobs in the site. He can view the information which is available for the job seekers. Also view the walk-in details. The job seeker can perform some tasks only after entering into the application. In any situation the job seeker needs to change his password then he can change on his own. He can view the details of his own profile and he can modify his details in his profile. The employer can view his own profile and they can also post new job vacancies and they can view the candidates resumes applied for jobs. The admin functions concentrates on maintain the functionality of site. Proper management of complete job seeker section and employer section is his responsibility.

### 3.2 Proposed system

The proposed system "WORKLORD" is a web based application is to give the job seekers a platform for finding right and satisfactory job according to their qualification and skills. It also connect the job seekers with the major companies. Job Portal is a platform that joins recruiters and the job seekers to complete their goals and requirements. Recruiters look for a right candidate who has the right qualification to handle the responsibilities efficiently. On the other hand, job seekers want a job where they can apply their skills and knowledge to grow their professional career. Most of the jobseekers who're actively seeking new employment opportunities are believed to be registered on multiple job portals. Finding a job opportunity per your choice and qualification through a job portal is relatively easier. There are many job portals that claims to provide you the best job, but none of them address the issues faced by the new job seekers. Most of portals give higher priority for experienced job seekers.

Job portals requires features like profile management, view notifications and other filtering options to match with the company with their skills. The users can perform some tasks without registering like he can search for the job vacancies, walk-in details which available in the notifications section. The job seeker can perform some tasks only after registration. After registering he can attend for tests and complete tasks. He can also view and modify his profile and also he can change his password. The employer can view their profile and they can post new job vacancies. They can also view the candidates resumes applied for jobs. The admin functions concentrates on maintaining the functionality of site. Proper management of complete job seeker section and employer section is his responsibility. He also provides tasks and updates test datas. Users analytics shows you a compiled listing of all users and the time they have spent using their Skills. Users analytics is one of the more important analytics sets when they are trying to calculate skills relating to an individual. We can check into a particular individual's performance and see how they are performing. Many companies prefer employees with good experiences and reputation in their previous job rather than freshers. This causes issues with finding jobs for freshers with right skills. In this project we will be trying to change such attitude towards freshers. This system facilitate the company to search for the best candidate available and employ them as employers to improve efficiency on the employment sector.

### 3.3 Module Description

### 3.3.1 User

- Search for Job Posts
- Apply Online for Job Posts
- Attend Exams in the website
- Complete Tasks
- Update Profile and Resume
- Send Reply to Applied Job's Company
- View Application's Status
- View Scores in Exams and Task

### 3.3.2 Company

- Add Job Posts
- Review Applications
- Download Applicant's Resume
- Contact Applicant
- View Messages from User
- View Exams and Task Scores

#### **3.3.3** Admin

- Manage Active Jobs
- Manage Users
- Manage Companies
- Add Exams and Update Questions
- Add Tasks
- Review Task
- View Task/Exam Scores

### 3.4 Feasibility Study

### 3.4.1 Operational Feasibility

This Project is beneficial to people who wants to meet the qualifications of theirs and company's requirements. There's not much difficulty in, implementing the proposed system, It is so more effective, user friendly and functionally reliable to everyone. WORK-LORD job portal is beneficial for every new job seekers, They can access this web portal from any where. This website can be accessed from any devices like laptop or smartphone with internet connection. Any of the user with good internet connection can register the website and complete tests and wait for right company to pick them up, users can make use of this portal by completing tasks which improves their skills.

### 3.4.2 Technical Feasibility

Technical Feasibility study deals with the hardware as well as software requirements. We have to determine whether the project done with the current technology has been examined in the feasibility study. The proposed system requires software like gedit and web server solution application called Xampp both are available for free. The website can also be easily upgraded to the higher level with less effort and maintenance. This website can be easily accessed with user's smartphone from anywhere with internet connection and portal is very much user friendly. Hence the Proposed system is technically feasible.

### 3.4.3 Economic Feasibility

Economic feasibility determines whether the proposed system is capable of generating profit for an organization. It involves cost incurred on the development team, estimated cost of hardware and cost of performing feasibility study and so on, this website was developed with the available resources. Since cost of input for the system is almost zero. The output of the website is always a profit for the user and we see this as a service. This website doesn't cost any charge from the job seeker who is accessing it. Since the website can be accessed from any device with internet connection there is no need for a specific hardware. Hence it is economically feasible.

### 3.5 System Environment

- Back-end : PHP,MYSQL(Database)

- Front-end : Javascript, Bootstrap, Html, CSS

### 3.5.1 Minimum Requirements (User)

- Computer/Laptop/Mobile

- Any OS with Updated Browser

- Stable Internet Access

### **3.5.2** Minimum Requirements (Developer)

- Processor : Intel Pentium/Celeron or newer

- Memory: 2 GB RAM

- Storage: 20 GB HDD/SSD (Recommended)

- Operating System : Linux

- Text Editor : Gedit

- Web server solution : Xampp

- Browser : Chrome

- Other Utils: Git

- Stable Internet Access

### 3.6 Actor and Their Roles

### 3.6.1 User

- Register
- Login
- Attend Tests
- Complete Task
- Edit User details
- Apply for Jobs
- Reply Messages from Company
- View Scores

### **3.6.2** Company

- Register
- Login
- Edit Company details
- View qualified users
- Add Job Posts
- Review Job Applications
- Download Resumes
- Send Messages to Applicants

#### **3.6.3** Admin

- Login
- View/Edit Users
- Approve Companies
- View/Edit Jobs
- Add Exams and Update Questions
- Add New Tasks
- Review Tasks

## **Chapter 4**

## **METHODOLOGY**

### 4.1 Introduction

This project follows Agile methodology. Agile software development comprises various approaches to software development under which requirements and solutions evolve through the collaborative effort of self organizing and cross-sectional teams and their customers/end users. It advocates adaptive planning, evolutionary development, early delivery and continuous improvement and it encourage rapid and flexible response to change.

## 4.2 UML Diagrams

### 4.2.1 Activity Diagram

### - USER

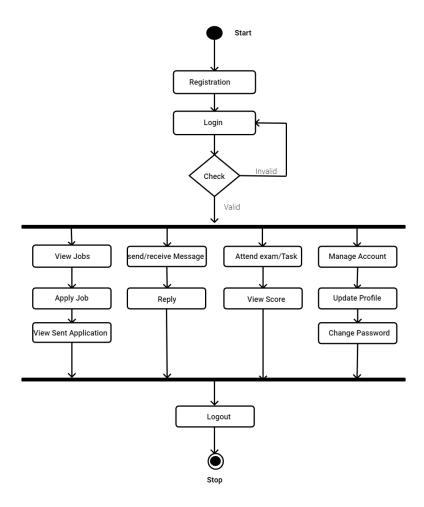


Figure 4.1: User's Activity Diagram

### - COMPANY

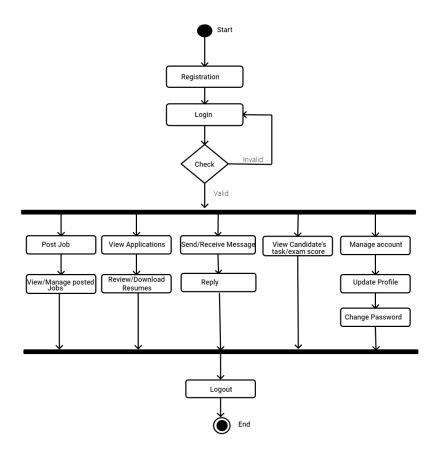


Figure 4.2: Company's Activity Diagram

### - ADMIN

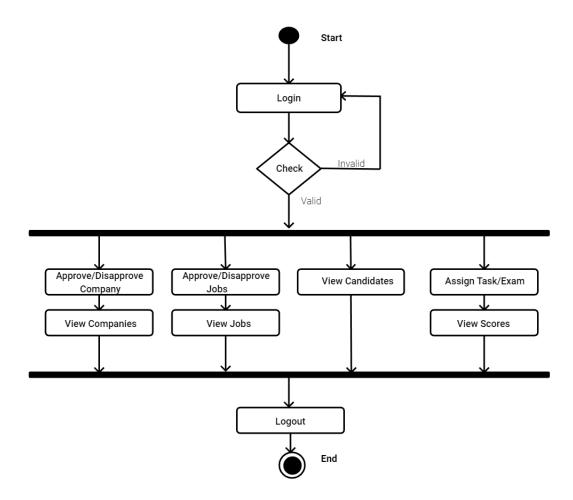


Figure 4.3: Admin's Activity Diagram

### 4.2.2 UseCase Diagrams

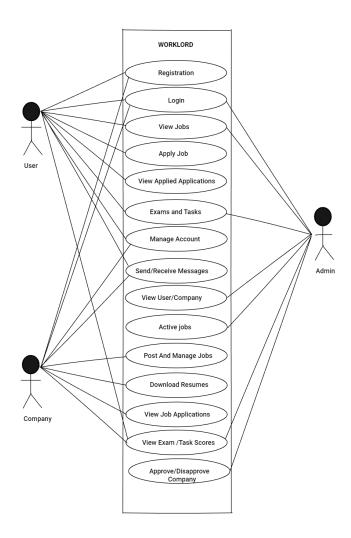


Figure 4.4: UseCase Diagram

## 4.3 User Story

User	As a <type of="" users=""></type>	I want to < Perform	So that I can <achieve< th=""></achieve<>	
story ID		some task>	some goal >	
1	Admin/User/Company	Home Page	Go to other activities	
2	User/Company	Registration	Access the system	
3	Admin/User/Company	Login	Access the system	
4	Admin	View companies	View companies	
5	Admin	Approve, Disapprove	Manage companies	
6	Commony	company	Add Job vaccancies	
_	Company	Post jobs		
7	Admin	View jobs, Delete Jobs	Manage jobs	
8	User	Search jobs, View	Search jobs, View jobs,	
		jobs, Apply job,	Apply job, View job appli-	
		View job applica-	cations	
		tions		
9	Company	View posted jobs	Manage posted jobs	
10	Company	View applications,	View job applications,	
		Download Resumes	Download Resumes	
11	Admin	Create exams, Add	Create exams, Add ques-	
		questions	tions	
12	Admin	Create tasks	Create tasks	
13	User	Attend exam	Attend exam	
14	Admin	View candidates	View candidates	
15	User	Attend task	Attend task	
16	Admin/User/Company	View exam, task	Understand knowledge,	
		scores	skills of candidates	
17	User/Company	Send and Receive Send/Receive Me		
		Messages		
18	User/Company	Manage account Update Profile		
			Password	

Figure 4.5: User Story

## 4.4 Product Backlog

USER STORY ID	PRIORITY (LOW,HIGH, MEDIUM)	SIZE	SPRINT	STATUS (PLANNED, PRO-	RELEASE DATE	RELEASE GOAL
				GRESSED,		
				COM-		
				PLETED)		
1	HIGH	8		Completed	15-09-2020	Login to the system
2	HIGH	7	1	Completed	18-09-2020	Access the sys-
						tem
3	HIGH	8		Completed	20-09-2020	Access the ac-
						count
4	MEDIUM	8		Completed	23-09-2020	View companies
5	HIGH	5		Completed	27-09-2020	Manage compa-
						nies
6	HIGH	7		Completed	30-09-2020	Add job vac-
7	HIGH			C 1 . 1	04.10.2020	canices
7	HIGH	6	2	Completed	04-10-2020	Manage jobs
8	MEDIUM	10		Completed	10-10-2020	Search
						jobs, View
						jobs,Apply job,View job
						applications
9	HIGH	6	_	Completed	11-10-2020	Manage posted
				Completed	11 10 2020	jobs
10	HIGH	9		Completed	14-10-2020	View applica-
				r		tions,Download
			3			Resumes
11	MEDIUM	6		Completed	19-10-2020	Create ex-
				_		ams,Add ques-
						tions
12	HIGH	6	]	Completed	22-10-2020	Create tasks
13	MEDIUM	6		Completed	26-10-2020	Attend exams

USER	PRIORITY	SIZE	SPRINT	STATUS	RELEASE	RELEASE
STORY	(LOW,HIGH,			(PLANNED,	DATE	GOAL
ID	MEDIUM)			PRO-		
				GRESSED,		
				COM-		
				PLETED)		
14	MEDIUM	10		Completed	28-10-2020	View Candi-
						dates
15	HIGH	10	4	Completed	31-10-2020	Attend task
16	MEDIUM	7		Completed	02-11-2020	Understand
						knowledge,
						skills of candi-
						dates
17	HIGH	8		Completed	05-11-2020	Send/Receive
						Messages
18	HIGH	8		Completed	08-11-2020	Update Profile,
						Change pass-
						word

Figure 4.6: Product Backlog

## 4.5 Project Plan

USER	TASK NAME	START	END	DAYS	STATUS
STORY		DATE	DATE		( TO BE
ID					FILLED
					BY SCRUM
					MASTER)
1		14-09-2020	15-09-2020	2	Completed
2		16-09-2020	18-09-2020	3	Completed
3	SPRINT 1	19-09-2020	20-09-2020	2	Completed
4		21-09-2020	23-09-2020	3	Completed
5		24-09-2020	27-09-2020	4	Completed
6		28-09-2020	30-09-2020	3	Completed
7		01-10-2020	04-10-2020	4	Completed
8	SPRINT 2	05-10-2020	10-10-2020	6	Completed
9		11-10-2020	11-10-2020	1	Completed
10		12-10-2020	14-10-2020	3	Completed
11		15-10-2020	19-10-2020	5	Completed
12	SPRINT 3	20-10-2020	22-10-2020	3	Completed
13		23-10-2020	26-10-2020	4	Completed
14		27-10-2020	28-10-2020	2	Completed
15		29-10-2020	31-10-2020	3	Completed
16	SPRINT 4	01-11-2020	02-11-2020	2	Completed
17		03-11-2020	05-11-2020	3	Completed
18		06-11-2020	08-11-2020	3	Completed

Figure 4.7: Project Plan

## 4.6 Sprint Backlog Planned

## 4.6.1 Sprint 1

Backlog items	Completion date	Original Estimated	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Day 11	Day 12	Day 13	Day 14
		hours	14/9/ 2020	15/09/ 2020	16/09/ 2020	17/09/ 2020	18/09/ 2020	19/09/ 2020	20/09/ 2020	21/09/ 2020	22/09/ 2020	23/09/ 2020	24/09/ 2020	25/09/ 2020	26/09/ 2020	27/09/ 2020
User Story 1			Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours
Form Design	15-09-2020	4	2	2												
Table Creation	15-09-2020	3	1	2												
Coding	15-09-2020	2		2												
Testing	15-09-2020	1		1												
User Story 2																
Form Design	17-09-2020	5			3	2										
Table Creation	18-09-2020	4			2	1	1									
Coding	18-09-2020	3			1	2										
Testing	18-09-2020	1					1									
User Story 3																
Form Design	19-09-2020	3						3								
Table Creation	20-09-2020	4						2	2							
Coding	20-09-2020	2						1	1							
Testing	20-09-2020	1							1							
User Story 4																
Form Design	22-09-2020	6								3	3					
Table Creation	23-09-2020	3								2	1					
Coding	23-09-2020	4									2	1				
Testing	23-09-2020	1										1				
User Story 5																
Form Design	25-09-2020	6											3	3		
Table Creation	25-09-2020	3											2	1		
Coding	26-09-2020	5												3	2	
Testing	27-09-2020	1														1

Figure 4.8: Sprint 1

### 4.6.2 Sprint 2

Backlog	Completion	Original	Day	Day	Day	Day	Day	Day	Day	Day	Day	Day	Day	Day	Day	Day
items	date	Estimated	1	2	3	4	5	6	7	8	9	10	11	12	13	14
		hours	28/9/	29/09/	30/09/	01/10/	02/10/	03/10/	04/10/	05/10/	06/10/	07/10/	08/10/	9/10/	10/10/	11/10/
			2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020
User			Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours
Story 6																
Form	29-09-2020	4	2	2												
Design																
Table	29-09-2020	2	1	1												
Creation				_	_											
Coding	30-09-2020	4		2	2											
Testing	30-09-2020	2			2											
User																
Story 7																
Form	02-10-2020	4				2	2									
Design																
Table	02-10-2020	2					2									
Creation	04-10-2020	5						3	2							
Coding	04-10-2020	5						3	2							
Testing	04-10-2020	2						1	1							
User																
Story 8 Form	06-10-2020	4								2	2					
Design	06-10-2020	4								2	2					
Table	07-10-2020	2										2				
Creation																
Coding	09-10-2020	7										2	2	2	1	
Testing	09-10-2020	3											1	1	1	
User																
Story 9																
Form	10-10-2020	3														3
Design																
Table	10-10-2020	1														1
Creation	44 40 0077	_														_
Coding	11-10-2020	3														3
Testing	11-10-2020	2														2

Figure 4.9: Sprint 2

### 4.6.3 Sprint 3

Backlog ( items	Completion date	Original Estimated	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Day 11	Day 12	Day 13	Day 14	Day 15
		hours	12/10/ 2020	13/10/ 2020	14/10/ 2020	15/10/ 2020	16/10/ 2020	17/10/ 2020	18/10/ 2020	19/10/ 2020	20/10/ 2020	21/10/ 2020	22/10/ 2020	23/10/ 2020	24/10/ 2020	25/10/ 2020	26/10/ 2020
User Story 10			Hours														
Form Design	13-10-2020	7	3	4													
Table Creation	13-10-2020	1	1														
Coding	14-10-2020	7	2	2	3												
Testing	14-10-2020	2			2												
User Story 11																	
Form Design	17-10-2020	8				3	3	2									
Table Creation	-1710-2020	3				3											
Coding	19-10-2020	8					1	2	3	3							
Testing	19-10-2020	2							1	1							
User Story 12																	
Form Design	21-10-2020	8									4	4					
Table Creation	21-10-2020	3									3						
Coding	22-10-2020	8										4	4				
Testing	22-10-2020	2										1	1				
User Story 13																	
Form Design	24-10-2020	8												4	4		
Table Creation	24-10-2020	3												3			
Coding	26-10-2020	8													2	3	3
Testing	26-10-2020	2														1	1

Figure 4.10: Sprint 3

### 4.6.4 Sprint 4

Backlog items	Completion date	Original Estimated	Day 1	Day 2	Day 3	Day 4	Day 6	Day 7	Day 8	Day 9	Day 10	Day 11	Day 12	Day 13	Day 14
		hours	27/10/ 2020	28/10/ 2020	29/10/ 2020	30/10/ 2020	31/10/ 2020	01/11/ 2020	02/11/ 2020	03/11/ 2020	04/11/ 2020	05/11/ 2020	06/11/ 2020	07/11/ 2020	08/11/ 2020
User Story 14			Hours					Hours							
Form Design	28-10-2020	3	3												
Table Creation	28-10-2020	0	0												
Coding	28-10-2020	5	5												
Testing	28-10-2020	1	1												
User Story 15															
Form Design	29-10-2020	7		3	4										
Table Creation	29-10-2020	1			1										
Coding	31-10-2020	7			3	2	2								
Testing	31-10-2020	2				1	1								
User Story 16															
Form Design	01-11-2020	4						4							
Table Creation	01-11-2020	2						2							
Coding	02-11-2020	6						2	4						
Testing	02-11-2020	2							2						
User Story 17															
Form Design	03-11-2020	6								4	2				
Table Creation	03-11-2028	2									2				
Coding	05-11-2020	7									2	5			
Testing	05-11-2020	2									1	1			
User Story 18															
Form Design	07-11-2020	7											4	3	
Table Creation	07-11-2020	0													
Coding	08-11-2020	8											2	4	2
Testing	08-11-2020	2												1	1

Figure 4.11: Sprint 4

## 4.7 Sprint Backlog Actual

## 4.7.1 Sprint 1

Backlog items	Completion date	Original Estimated	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Day 11	Day 12	Day 13	Day 14
		hours	14/9/ 2020	15/09/ 2020	16/09/ 2020	17/09/ 2020	18/09/ 2020	19/09/ 2020	20/09/ 2020	21/09/ 2020	22/09/ 2020	23/09/ 2020	24/09/ 2020	25/09/ 2020	26/09/ 2020	27/09/ 2020
User Story 1			Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours
Form Design	15-09-2020	4	2	2												
Table Creation	15-09-2020	3	1	2												
Coding	15-09-2020	3		3												
Testing	15-09-2020	1		1												
User Story 2																
Form Design	17-09-2020	6			3	3										
Table Creation	18-09-2020	4			2	1	1									
Coding	18-09-2020	6			1	2	3									
Testing	18-09-2020	2					2									
User Story 3																
Form Design	19-09-2020	3						3								
Table Creation	20-09-2020	3						2	1							
Coding	20-09-2020	4						1	3							
Testing	20-09-2020	2							2							
User Story 4																
Form Design	22-09-2020	6								3	3					
Table Creation	23-09-2020	3								2	1					
Coding	23-09-2020	5									2	3				
Testing	23-09-2020	1										1				
User Story 5																
Form Design	25-09-2020	6											3	3		
Table Creation	25-09-2020	3											2	1		
Coding	26-09-2020	7												3	4	
Testing	27-09-2020	2														2

Figure 4.12: Sprint 1

# 4.7.2 Sprint 2

Backlog items	Completion date	Original Estimated	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Day 11	Day 12	Day 13	Day 14
items	date	hours	28/9/	29/09/ 2020	30/09/ 2020	01/10/	02/10/ 2020	03/10/	04/10/ 2020	05/10/ 2020	06/10/ 2020	07/10/ 2020	08/10/ 2020	9/10/ 2020	10/10/	11/10/
User Story 6			Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours
Form Design	29-09-2020	5	3	2												
Table Creation	29-09-2020	2	1	1												
Coding	30-09-2020	6		3	3											
Testing	30-09-2020	2			2											
User Story 7																
Form Design	02-10-2020	4				2	2									
Table Creation	02-10-2020	2					2									
Coding	04-10-2020	6						3	3							
Testing	04-10-2020	2						1	1							
User Story 8																
Form Design	06-10-2020	6								3	3					
Table Creation	07-10-2020	2										2				
Coding	09-10-2020	9										3	3	2	1	
Testing	09-10-2020	3											1	1	1	
User Story 9																
Form Design	10-10-2020	3														3
Table Creation	10-10-2020	1														1
Coding	11-10-2020	3														3
Testing	11-10-2020	2														2

Figure 4.13: Sprint 2

# 4.7.3 Sprint 3

																			1		
Backlo	Completion date	Original	Day	Day	Day	Day	Day	Day	Day	Day	Day	Day	Day	Day	Day	Day	Day	Day	Day	Day	Day
g items	date	Estimat ed	1 12/10	2 13/10	3 14/10	4 15/10	5 16/10	6 17/10	7 18/10	8 19/10	9 20/10	10 21/10	22/10	12 23/10	13 24/10	14 25/10	15 26/10	16 27/10	17 28/10	18 29/10	19 30/10
iteilis		hours	/2020	/2020	/2020	/2020	/2020	/2020	/2020	/2020	/2020	/2020	/2020	/2020	/2020	/2020	/2020	/2020	/2020	/2020	/2020
User			Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours
Story																					
10																					
Form	13-10-2020	8	4	4																	
Design	40.40.0000																				$\vdash$
Table Creati	13-10-2020	1		1																	
on																					
Coding	14-10-2020	8	2	2	4																
Testin	14-10-2020	2			2																$\vdash$
g	14 10 2020	-			*																
User																					$\vdash$
Story																					
11																					
Form Design	17-10-2020	9				3	3	3													
Table	17-10-2020	1						1													
Creati		_						_													
on																					
Coding	19-10-2020	13					1	3	5	4											
Testin	19-10-2020	2							1	1											$\Box$
g																					
User																					
Story 12																					
Form	21-10-2020	8									4	4									
Design		_																			
Table	21-10-2020	1										1									
Creati																					
on																					$\square$
Coding	24-10-2020	12										4	4	3	1						
Testin	24-10-2020	2												1	1						
User																					$\vdash$
Story																					
13																					
Form	27-10-2020	10														3	3	4			
Design																					
Table	26-10-2020	1															1				
Creati																					
on																		-	L .		<u> </u>
Coding	30-10-2020	13																2	4	4	3
Testin	30-10-2020	2																			2
g																					'

Figure 4.14: Sprint 3

# 4.7.4 Sprint 4

Backlog items	Completion date	Original Estimated	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Day 11	Day 12	Day 13	Day 14
		hours	31/10/ 2020	01/11/ 2020	02/11/ 2020	03/11/ 2020	04/11/ 2020	05/11/ 2020	06/11/ 2020	07/11/ 2020	08/11/ 2020	09/11/ 2020	10/11/ 2020	11/11/ 2020	12/11/ 2020	13/11/ 2020
User Story 14			Hours													
Form Design	31-10-2020	2	2													
Table Creation	31-10-2020	0	0													
Coding	31-10-2020	4	4													
Testing	31-10-2020	1	1													
User Story 15																
Form Design	03-11-2020	8		3	3	2										
Table Creation	01-11-2020	1		1												
Coding	04-11-2020	10		2	3	4	1									
Testing	04-11-2020	3			1	1	1									
User Story 16																
Form Design	08-11-2020	4						2			1	1				
Table Creation	11-11-2020	1							1							
Coding	11-11-2020	8						2		1	2		2	1		
Testing	11-11-2020	5										3	1	1		
User Story 17																
Form Design	12-11-2020	4													3	1
Table Creation	11-11-2020	1													1	
Coding	13-11-2020	6													3	3
Testing	13-11-2020	2													1	1

Figure 4.15: Sprint 4

Backlog items	Completion date	Original Estimated	Day 15	Day 16
		hours	14/11/ 2020	15/11/ 2020
User			Hours	Hours
Story 18				
Form	14-11-2020	3	3	
Design				
Table	14-11-2020	1	1	
Creation				
Coding	15-11-2020	5	3	2
Testing	15-11-2020	3	1	2

Figure 4.16: Sprint 4

# 4.8 Sprint Review

# 4.8.1 Sprint 1

User	Comments from scrum master,	Comments from product owner,
story ID	if any	if any
1	Satisfied	Satisfied
2	Completed	Data enter in registration form must preserve whenever an error occure during the form validation time.
3	Satisfied	Satisfied
4	Satisfied	Satisfied
5	Satisfied	Satisfied

Table 4.1: Sprint 1

# 4.8.2 Sprint 2

User	Comments from scrum master,	Comments from product owner,
story ID	if any	if any
6	Satisfied	Satisfied
7	Satisfied	Satisfied
8	Satisfied	Satisfied
9	Satisfied	Satisfied

Table 4.2: Sprint 2

# 4.8.3 Sprint 3

User	Comments from scrum master,	Comments from product owner,
story ID	if any	if any
10	Satisfied	Satisfied
11	Satisfied	Satisfied
12	Satisfied	Satisfied
13	Completed	Remove user id,user name and sta-
		tus in user view exam result.

Table 4.3: Sprint 3

# 4.8.4 Sprint 4

User	Comments from scrum master,	Comments from product owner,
story ID	if any	if any
14	Satisfied	Satisfied
15	Satisfied	Satisfied
16	Satisfied	Satisfied
17	Satisfied	Satisfied
18	Satisfied	Satisfied

Table 4.4: Sprint 4

# 4.9 Database Design

### 4.9.1 Login Table

Both uses and company can access their account only after login in to the system with proper username and password. This Table stores username and password of both users and company who registered in the website.

No.	FIELD NAME	TYPE	CONSTRAINTS	DESCRIPTION
1	loginid	INT(3)	PRIMARY KEY	User's ID
2	email	VARCHAR(30)	UNIQUE	User's Email
3	password	VARCHAR(20)	NOTNULL	User's Password
4	role	VARCHAR(10)	NOTNULL	Usertype

Table 4.5: Login Table

### 4.9.2 Company Table

Any companies can gets the functionality of the system only after their registration. This Table stores Company details uploaded at the time of registration.

No.	FIELD NAME	TYPE	CONSTRAINTS	DESCRIPTION
1	companyid	INT(11)	PRIMARY KEY	Company ID
2	name	VARCHAR(50)	NOTNULL	Employer's Name
3	companyname	VARCHAR(50)	NOTNULL	Company Name
4	country	VARCHAR(50)	NOTNULL	Company Country
5	state	VARCHAR(10)	NOTNULL	Company State
6	city	VARCHAR(50)	NOTNULL	Company City
7	contactno	VARCHAR(50)	NOTNULL	Company Phone Num-
				ber
8	website	VARCHAR(50)	NOTNULL	Company Website
9	email	VARCHAR(50)	UNIQUE	Company's Email
10	aboutme	VARCHAR(100)	NOTNULL	About Company
11	logo	VARCHAR(100)	NOTNULL	Company Logo Name
12	active	INT(2)	NOTNULL	Account Status

Table 4.6: Company Table

## 4.9.3 User Table

Any users can gets the functionality of the system only after their registration. This Table stores details of Users uploaded at the time of registration.

No.	FIELD NAME	TYPE	CONSTRAINTS	DESCRIPTION
1	userid	INT(11)	PRIMARY KEY	User's ID
2	firstname	VARCHAR(50)	NOTNULL	User's Firstname
3	lastname	VARCHAR(50)	NOTNULL	User's Lastname
4	email	VARCHAR(50)	UNIQUE	User's Email
5	address	VARCHAR(50)	NOTNULL	User's Address
6	country	VARCHAR(50)	NOTNULL	User's Address
7	city	VARCHAR(50)	NOTNULL	User's Country
8	state	VARCHAR(10)	NOTNULL	User's State
9	contactno	VARCHAR(50)	NOTNULL	User's Phone Number
10	qualifications	VARCHAR(50)	NOTNULL	User's Qualifications
11	stream	VARCHAR(20)	NOTNULL	User's Course
12	passingyear	VARCHAR(10)	NOTNULL	User's Year Of Passing
13	dob	DATE	NOTNULL	User's Date Of Birth
14	age	INT(3)	NOTNULL	User's Age
15	designation	VARCHAR(50)	NOTNULL	User's Preferred
				D6signation
16	aboutme	VARCHAR(100)	NOTNULL	About User
17	skills	VARCHAR(50)	NOTNULL	User's Skills
18	resume	VARCHAR(100)	NOTNULL	User's Resume Name

Table 4.7: User Table

#### **4.9.4** Countries Table

This table stores the countrie's name.

No.	FIELD NAME	TYPE	CONSTRAINTS	DESCRIPTION
1	id	INT(11)	PRIMARY KEY	Country ID
2	name	VARCHAR(150)	UNIQUE	Country Name

Table 4.8: Country Table

#### 4.9.5 States Table

This table stores the names of states in each country.

No.	FIELD NAME	TYPE	CONSTRAINTS	DESCRIPTION
1	id	INT(11)	PRIMARY KEY	State ID
2	name	VARCHAR(30)	UNIQUE	State Name
3	countryid	INT(11)	FOREIGN KEY	Country ID

Table 4.9: States Table

#### 4.9.6 Cities Table

This table stores the names of cities in each states.

No.	FIELD NAME	TYPE	CONSTRAINTS	DESCRIPTION
1	id	INT(11)	PRIMARY KEY	City ID
2	name	VARCHAR(30)	NOTNULL	City Name
3	stateid	INT(11)	FOREIGN KEY	State ID

Table 4.10: Cities Table

#### 4.9.7 Job Post Table

Each registered company can post the job vaccancies in their company. This Table stores Job Posts Details provided by the Companies

No.	FIELD NAME	TYPE	CONSTRAINTS	DESCRIPTION
1	postid	INT(3)	PRIMARY KEY	Post ID
2	companyid	INT(3)	FOREIGN KEY	Company ID
3	jobtitle	VARCHAR(20)	NOTNULL	Job Title
4	description	VARCHAR(50)	NOTNULL	About Job
5	minimumsalary	VARCHAR(20)	NOTNULL	Minimum Salary
6	maximumsalary	VARCHAR(20)	NOTNULL	Maximum Salary
7	experience	INT(3)	NOTNULL	Experience State
8	qualifications	VARCHAR(50)	NOTNULL	Job Qualifications
9	duedate	DATE	NOTNULL	Due Date

Table 4.11: Job Post Table

## 4.9.8 Job Apply Table

Users can view the job vaccancies posted by different companies and they can apply for jobs according to their interest. This Table stores Applied User's details and status of Application

No.	FIELD NAME	TYPE	CONSTRAINTS	DESCRIPTION
1	applyid	INT(3)	PRIMARY KEY	Job Application Apply
				ID
2	jobpostid	INT(3)	FOREIGN KEY	Job Post ID
3	companyid	INT(3)	FOREIGN KEY	Company ID
4	userid	INT(3)	FOREIGN KEY	User's ID
5	status	INT(3)	NOTNULL	Application Status

Table 4.12: Job Apply Table

#### 4.9.9 Exams Table

Admin conduct exams for candidates to know their knowledge. Admin create exams and this Table stores that Exam details.

No.	FIELD NAME	TYPE	CONSTRAINTS	DESCRIPTION
1	examid	INT(3)	PRIMARY KEY	Exam ID
2	examname	VARCHAR(30)	NOTNULL	Exam Name
3	duration	INT(3)	NOTNULL	Exam Duration
4	passmark	INT(5)	NOTNULL	Exam Passmark
5	terms	VARCHAR(150)	NOTNULL	Exam Terms

Table 4.13: Exams Table

## 4.9.10 Exam Questions Table

Admin conduct exams for candidates to know their knowledge, so admin need to be add and upadate questions. This table stores the questions for each exams.

No.	FIELD NAME	TYPE	CONSTRAINTS	DESCRIPTION
1	questionid	INT(3)	PRIMARY KEY	Question ID
2	examid	VARCHAR(15)	FOREIGN KEY	Exam ID
3	type	VARCHAR(50)	NOTNULL	Question Category
4	question	LONGTEXT	NOTNULL	Question
5	option1	VARCHAR(50)	NOTNULL	Question Option 1
6	option2	VARCHAR(50)	NOTNULL	Question Option 2
7	option3	VARCHAR(50)	NOTNULL	Question Option 3
8	option4	VARCHAR(50)	NOTNULL	Question Option 4
9	answer	VARCHAR(50)	NOTNULL	Question Answer

Table 4.14: Exam Questions Table

#### 4.9.11 Assessment Record Table

Each candidates should attend the exam assigned by the admin and the exam score can be view by the admin,company and user. This table store exam scores of each candidates.

No.	FIELD NAME	TYPE	CONSTRAINTS	DESCRIPTION
1	recordid	INT(3)	PRIMARY KEY	Record ID
2	userid	INT(3)	FOREIGN KEY	User's ID
3	examid	VARCHAR(20)	FOREIGN KEY	Exam ID
4	score	INT(5)	NOTNULL	User's Score
5	status	INT(2)	NOTNULL	Result Status
6	date	DATE	NOTNULL	Exam Date

Table 4.15: Assessment Record Table

#### **4.9.12** Task Table

Admin assign different tasks for candidates to know their skills. This table store task details that assigned by admin for candidates.

No.	FIELD NAME	TYPE	CONSTRAINTS	DESCRIPTION
1	taskid	INT(3)	PRIMARY KEY	Task ID
2	taskname	VARCHAR(50)	NOTNULL	Task Name
3	question	VARCHAR(500)	NOTNULL	Question
4	passmark	INT(3))	NOTNULL	Pass Mark
5	terms	LONGTEXT	NOTNULL	Task Details
6	status	INT(2)	NOTNULL	Task Status

Table 4.16: Task Table

#### 4.9.13 Task Submit Table

Each candidate responsible for complete the task assigned for them. This table stores candidates's submitted task details, status and scores.

No.	FIELD NAME	TYPE	CONSTRAINTS	DESCRIPTION
1	taskid	INT(3)	PRIMARY KEY	Task ID
2	userid	INT(3)	FOREIGN KEY	Candidate ID
3	tasksubmitdate	DATE	NOTNULL	Task Submit Date
4	tasksubmitstatus	INT(5)	NOTNULL	Task Submit Status
5	taskreviewstatus	INT(5)	NOTNULL	Task Review Status
6	tasklink	VARCHAR(200)	NOTNULL	Task Github Link
7	taskscore	INT(10)	NOTNULL	Task Status

Table 4.17: Tasks Submit Table

#### **4.9.14** MailBox

There is an option to make communication between user and company. This Table stores Mail details that is to be send/receive from user/company.

No.	FIELD NAME	TYPE	CONSTRAINTS	DESCRIPTION
1	idmailbox	INT(3)	PRIMARY KEY	Mail ID
2	idfromuser	INT(3)	NOTNULL	ID of user send mes-
				sage
3	fromuser	VARCHAR(10)	NOTNULL	Type of user who send
4	idtouser	INT(3)	NOTNULL	The id of user to be
				send
5	subject	VARCHAR(100)	NOTNULL	Message subject
6	message	VARCHAR(300)	NOTNULL	Message
7	date	DATE	NOTNULL	Date of message cre-
				ation

Table 4.18: MailBox Table

# 4.9.15 Reply MailBox

There is an option to make communication between user and company. This Table stores Mail details that is to be send/receive from user/company.

No.	FIELD NAME	TYPE	CONSTRAINTS	DESCRIPTION
1	idreply	INT(3)	PRIMARY KEY	ID of reply message
2	idmailbox	INT(3)	FOREIGN KEY	Mail ID
3	iduser	VARCHAR(10)	FOREIGN KEY	ID of user
4	usertype	INT(3)	FOREIGN KEY	Type of user
6	message	VARCHAR(300)	NOTNULL	Message
7	date	DATE	NOTNULL	Date of message cre-
				ation

Table 4.19: Reply MailBox Table

# 4.10 User Interface Design

### 4.10.1 Homepage

This form show Homepage of Worklord Website. From which we can go to all other activities.



Figure 4.17: Homepage

## 4.10.2 Login

Once registerd in the website, using this Page admin, company and users can login to their accounts.



Figure 4.18: Login

#### 4.10.3 Job Search

Helps to Search Available Jobs in the website. There is also an option to search jobs based on experience, job name etc.



Figure 4.19: Job Search

#### 4.10.4 **Jobs**

Show the each of the job Details.and also candidate can apply for particular job.

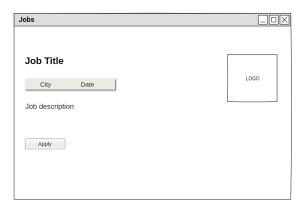


Figure 4.20: Jobs

#### **4.10.5** Mailbox

View messages from User/Company and Compose messages to User/Company

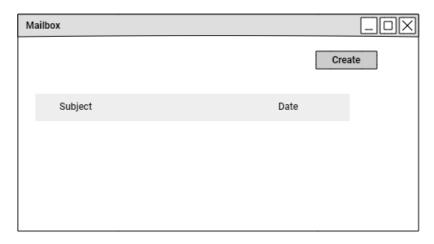


Figure 4.21: MailBox

#### 4.10.6 View Mailbox

View messages from User/Company and Reply to those messages

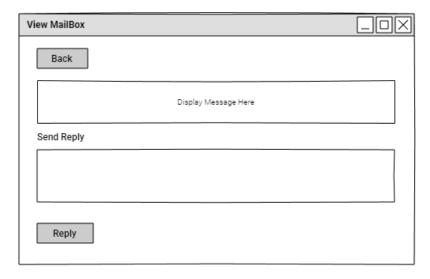


Figure 4.22: View MailBox

#### 4.10.7 Compose Message

Compose Messages to User or Company (Shows users Applied for Jobs)

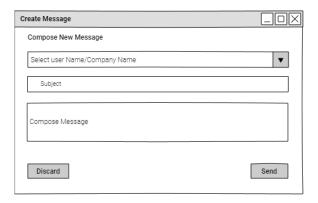


Figure 4.23: Compose Message

## 4.10.8 User Registration

Registration form for User

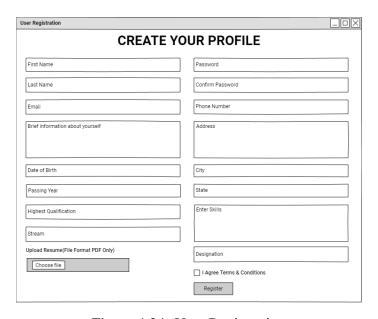


Figure 4.24: User Registration

### 4.10.9 User Dashboard

Dashboard for Users, Shows available functions for user

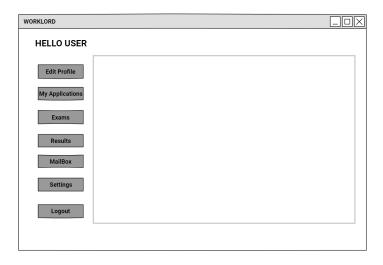


Figure 4.25: User Dashboard

## **4.10.10** My Applications

This show Applied Job's Details and Status

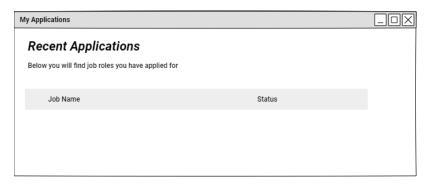


Figure 4.26: My Applications

# 4.10.11 Update Profile

Update User's Details and Resume.

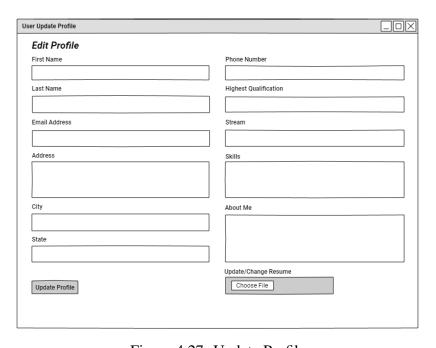


Figure 4.27: Update Profile

### 4.10.12 User Exam Overview

Attend Exams and View scores



Figure 4.28: User Exam Overview

### 4.10.13 User view Examlist

Attend Exams and View scores



Figure 4.29: User view Examlist

### 4.10.14 User Take Assessment

Attend Exams and View scores

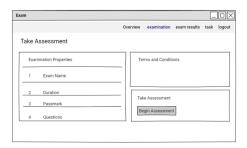


Figure 4.30: User Take Assessment

### 4.10.15 User Attend Exam

Attend Exams and View scores



Figure 4.31: User Attend Exam

## 4.10.16 User View Tasks

#### Attend Tasks

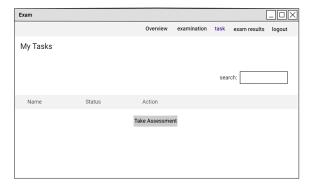


Figure 4.32: User View Tasks

## 4.10.17 User Submit Task

Attend Tasks



Figure 4.33: User Submit Task

#### 4.10.18 User View Exam Results

View Scores for Task and Exams

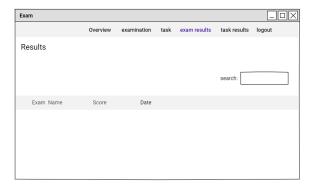


Figure 4.34: User View Exam Results

#### 4.10.19 User View Task Results

View Scores for Task and Exams



Figure 4.35: User View Task Results

### **4.10.20** Settings

registered user can Change Password and also Delete Account if needed.



Figure 4.36: Settings

# 4.10.21 Company Registration

Registration form for company



Figure 4.37: Company Registration

### 4.10.22 Dashboard

Dashboard for company

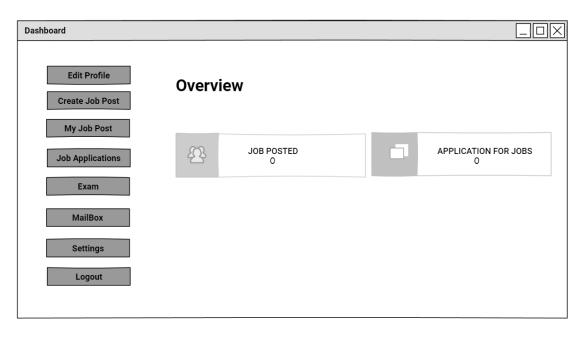


Figure 4.38: Dashboard

#### **4.10.23** Edit Profile

Edit Company details

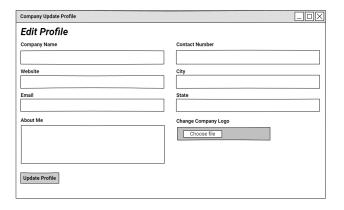


Figure 4.39: Edit Profile

## 4.10.24 Create Job Post

Create New Job Posts with Details

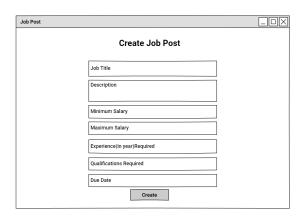


Figure 4.40: Create Job Post

#### **4.10.25 Job Posts**

View posted Jobs by Company



Figure 4.41: Job Posts

# **4.10.26 Job Applications**

View Job Post Applications from Users and Review

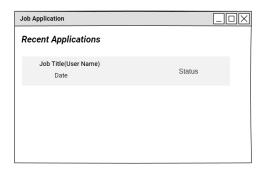


Figure 4.42: Job Applications

### 4.10.27 Download Resumes

Download Resumes of Applied Users for Company's Job Posts

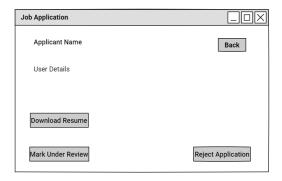


Figure 4.43: Download Resume

# 4.10.28 Company View all Exam

Using this form company can view all eaxams and search any candidate's exam score who attend the task.

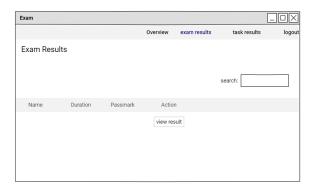


Figure 4.44: Company View all Exam

# 4.10.29 Company View Exam Score

Using this form company can view any candidate's exam score who attend the exam.

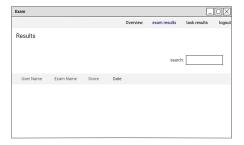


Figure 4.45: Company Exam Score

# 4.10.30 Company View All Task

Using this form company can view all tasks and search any candidate's task score who submit the task.



Figure 4.46: Company View All Task

# 4.10.31 Company View Task Scores

Using this form company can view any candidate's task score who submit the task.

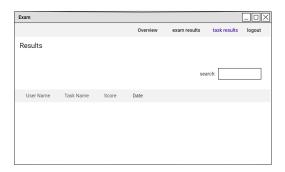


Figure 4.47: Company View Task Scores

# **4.10.32** Settings

registered company can Change FullName or Password of Company and also Delete Account if needed.

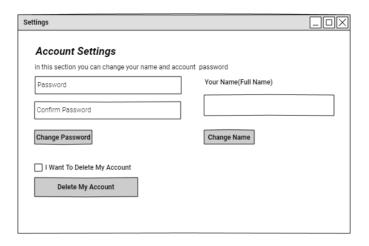


Figure 4.48: Settings

## 4.10.33 Admin Homepage

Overview of WorkLord with Registered Companies, User, Job Post, etc..

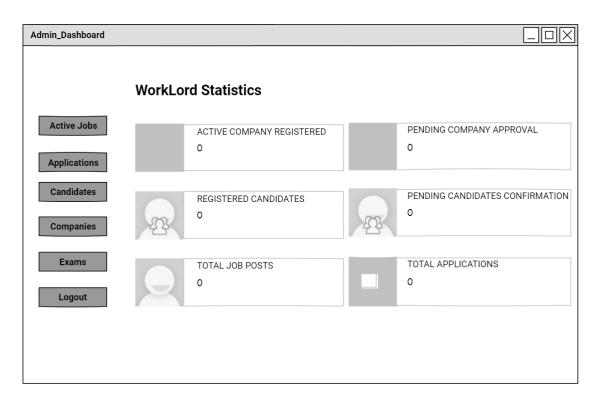


Figure 4.49: Admin Homepage

#### **4.10.34** Active Jobs

Admin can active or reject job vaccancies posted by different companies.



Figure 4.50: Active Jobs

#### 4.10.35 Candidates

Show candidates details that are registered in the website and also can download the resume of each cadidates.

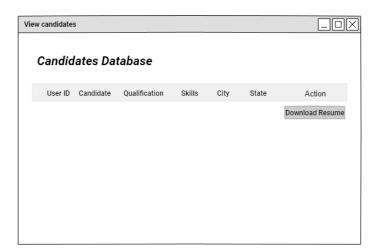


Figure 4.51: Candidates

# 4.10.36 Companies

Show company details that are registered in the website and also can approve or rejact the registration of each company.

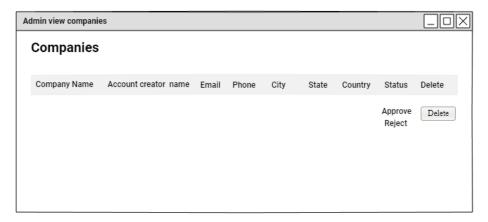


Figure 4.52: Companies

# 4.10.37 Admin Exam Dashboard

Show details of exams.



Figure 4.53: Admin Exam Dashboard

#### 4.10.38 Admin View Exams

View alla exams created by admin.



Figure 4.54: Admin View Exams

# 4.10.39 Admin Add Exams

Admin can create new exam with exam name, duration, terms and conditions and passmark.

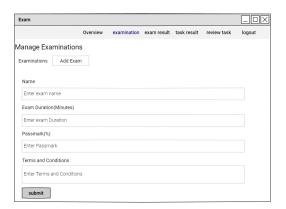


Figure 4.55: Admin Add Exams

# 4.10.40 Add Questions

#### Add Questions for Exams



Figure 4.56: Add Questions

# 4.10.41 View Exam Questions

Using this form admin can view questions of each exams and also can upadate and delete questions.

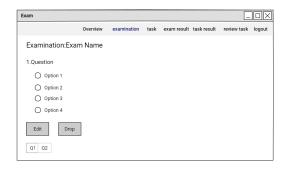


Figure 4.57: View Exam Questions

## **4.10.42** View Tasks

View alla task created by admin.



Figure 4.58: View Tasks

#### **4.10.43** Add Tasks

Admin can create new tasks with task name, question, terms and conditions and passmark.

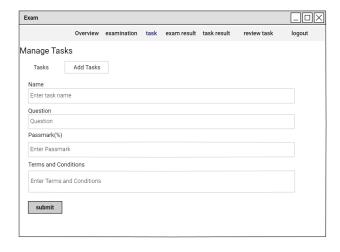


Figure 4.59: Add Tasks

# 4.10.44 View Task Question

Using this form admin can view question of each task.



Figure 4.60: View Task Question

#### 4.10.45 Admin View All Exam Scores

This form list all task created by admin.By selecting action admin can view candidate's task score of each task.



Figure 4.61: Admin View All Exam Scores

#### 4.10.46 Admin View Particular Exam Scores

Admin can view scores of particular task submited by candidates.

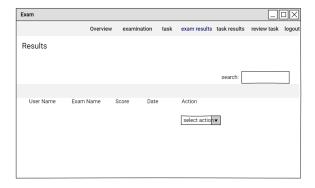


Figure 4.62: Admin View Particular Exam Scores

#### 4.10.47 Admin View All Task Scores

This form list all task created by admin.By selecting action admin can view candidate's task score of each task.



Figure 4.63: Admin View All Task Scores

## 4.10.48 Admin View Particular Task Scores

Admin can view scores of particular task submited by candidates.

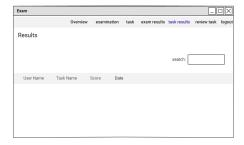


Figure 4.64: Admin View Particular Task Scores

#### 4.10.49 View Tasks For Review

This form list all the tasks one by one created by admin.by selecting action admin can view list of candidates they submit particular task.

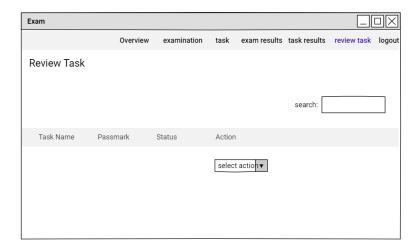


Figure 4.65: T View Tasks For Review

# 4.10.50 Review Tasks

This form list all candidate they submit a particular task.from which admin can move to reviewing each task.

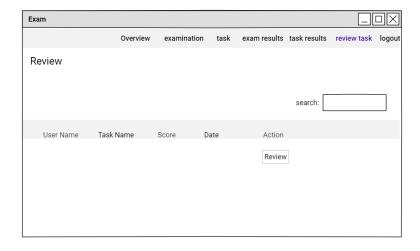


Figure 4.66: Review Tasks

#### 4.10.51 Enter Task Score

Admin can evaluate the task submited by candidates by evaluating the githublink and upload the score for their task using this form. This form also display task question and it's properties.

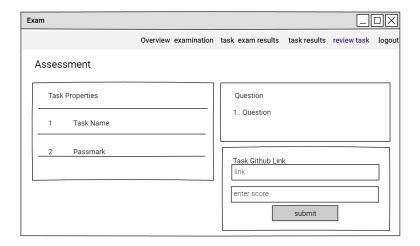


Figure 4.67: Enter Task Score

# **Chapter 5**

# **TESTING AND IMPLEMENTATION**

# 5.1 Testing

#### **5.1.1** Test Case - 1

No.	Date	Action	<b>Expected Result</b>	<b>Actual Result</b>	Pass?
1	15-09-2020	Home page	Admin/ Com-	Admin/ Com-	Yes
			pany/ Candidates	pany/ Candidates	
			can view the type	can view the type	
			of services.	of services.	
2	18-09-2020	Registration	Company/ Candi-	Company/ Candi-	Yes
			dates should be	dates should be	
			able to register	able to register	
			into the System	into the System	
3	20-09-2020	Login	Users of the sys-	Users of the sys-	Yes
			tem can able to	tem can able to	
			login to the sys-	login to the sys-	
			tem	tem	
4	23-09-2020	View com-	Admin can view	Admin can view	Yes
		panies	the companies	the companies	
			register in the	register in the	
			system	system	
5	27-09-2020	Approve/	Admin can ap-	Admin can ap-	Yes
		Disapprove	prove or reject or	prove or reject or	
		Company	reactivate com-	reactivate com-	
			pany registration	pany registration	

Table 5.1: Test Case - 1

## **5.1.2** Test Case - 2

No.	Date	Action	<b>Expected Result</b>	Actual Result	Pass?
6	30-09-2020	Post Jobs	Employer can	Employer can	Yes
			post job va-	post job va-	
			cancies in their	cancies in their	
			company	company.	
7	04-10-2020	View and	Admin can view	Admin can view	Yes
		Delete Jobs	and delete job	and delete job	
			post	post	
8	10-10-2020	Search,	Users can view,	Users can view,	Yes
		view, apply	search and apply	search and apply	
		jobs and	for jobs and also	for jobs and also	
		view ap-	view their applied	view their applied	
		plied job	job applications	job applications	
		applica-			
		tions			
9	11-10-2020	View	Companies can	Companies can	Yes
		Posted Jobs	view and delete	view and delete	
			their posted job	their posted job	
			vacancies	vacancies	

Table 5.2: Test Case - 2

## **5.1.3** Test Case - 3

No.	Date	Action	<b>Expected Result</b>	<b>Actual Result</b>	Pass?
10	14-10-2020	View Job	Employer can	Employer can	Yes
		Applica-	view job appli-	view job appli-	
		tions And	cation for their	cation for their	
		Download	job post applied	job post applied	
		resumes	by different can-	by different can-	
			didates and also	didates and also	
			employer can	employer can	
			download their	download their	
			resumes.	resumes.	
11	19-10-2020	Create Ex-	Admin can create	Admin can create	Yes
		ams	exam, add ques-	exam, add ques-	
			tions and also	tions and also	
			manage created	manage created	
			exams.	exams	
12	22-10-2020	Create	Admin can create	Admin can create	Yes
		Tasks	Tasks, add ques-	Tasks, add ques-	
			tions and also	tions and also	
			manage created	manage created	
			tasks	tasks.	
13	30-10-2020	Attend	User can attend	User can attend	Yes
		Exam	exams.	exams.	

Table 5.3: Test Case - 3

## **5.1.4** Test Case - 4

No.	Date	Action	<b>Expected Result</b>	<b>Actual Result</b>	Pass?
14	31-10-2020	View can-	Admin can view	Admin can view	Yes
		didates	registered candi-	registered candi-	
			dates details.	dates details.	
15	04-11-2020	Attend	User can submit	User can submit	Yes
		Task	task	task	
16	11-11-2020	View	Admin/ user/	Admin/ user/	Yes
		Exam, Task	company can	company can	
		Scores,	view candidate's	view candidate's	
		Review	exam and task	exam and task	
		tasks	scores.	scores.	
17	13-11-2020	Send/	user/ company	user/ company	Yes
		Receive	can send or re-	can send or re-	
		Messages	ceive messages.	ceive messages.	
18	15-11-2020	Update	User/ company	User/ company	Yes
		profile and	can update their	can update their	
		change	profile and can	profile and can	
		password	change password.	change password.	

Table 5.4: Test Case - 4

#### 5.2 Implementation

After testing, the proposed system is ready for the implementation. Implementation is the stage of the project when the theoretical design is turned in to a working system. Implementation is the process of bringing a newly developed system or revised into operational one. The new system and its components are to be tested in a structured and planned manner. The implementation stage of a project is often very complex and time consuming and many more people are involved in the earlier stages. This involves careful planning, investigation of the current system and constraints of implementation, installing hardware, training the operating users in the changeover procedures before the system is setup and running. So, proposed system is easy to implement. It would be very easy to run also.

While implementing this system we only have few challenges. First challenge is to provide access to this webpage from anywhere or any device with internet access. For that we had to host the webpage in server with database access. If number users increase in this situation it won't affect as much as hosting in a local server. Most Hosting Providers have highly capable bandwidth and powerful computer to handle such traffic. The user must have a device with brower and stable internet access. Rest of the challenges are depended on the user, knowledge about using an electronic device and using it for accessing website.

# Chapter 6 RESULTS AND DISCUSSION

# Chapter 7 CONCLUSION

# Chapter 8 REFERENCES

# **Chapter 9**

# **APPENDIX**

- 9.1 Source Code
- 9.2 Screenshots
- 9.3 Git History