

## HUMAN RESOURCE MANAGEMENT USING PHONEGAP

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**Abstract** –in the present scenario HR is able to complete his tasks iff he is available at organization. The aim is to develop a mobile application for the human resource management. Where the basic objectives are to extend their reach to complete their task irrespective of their location, reducing time in activities, consolidate data handling along with difference in phone gap. The current system is desktop where all the activities needs to perform manually the system takes lot of time in performing different activities as all the activities are consolidate. In this project, an organization requires less of desktop requirement. This technology reduces not only the desktop requirement but all required time.

The possible solution is to allow all the HR work through an application using mobile app instead of desktop, using phone gap technology.

Phone gap is mobile development framework which enables to build the applications for mobile devices which are neither truly native nor purely web-based.

The system allows HR manager and employees to use the app to request time off, view companies directories, org updates and many more via notification and respond as an alert messages.

**Key Words:** phone gap, HR management

### 1. INTRODUCTION

The project “human resource management using phone gap” is web-based application. The main aim of the project was to develop a human resource module for the automation of HR software in which all the information regarding the employees in the company will be present. This has to be developed with good interaction/communication facilities between the employees and HR administrator in such a manner that a level of hierarchy was maintained between the various employees.

**Objectives:** to develop an application that deals with the day to day requirement of any organization. To enable the end users as well as the organization come out with an easy to handle application of the human resource management.

### 1.2 project overview:

The project human resource management using phone-Gap is a complete web application designed on Phone Gap

technology. The user interface is designed using HTML, CSS, and JavaScript while the server side programming is done completely using Servlets and Oracle is used as database.

Each employee had an employee ID and password through which he can log in. depending on the type of employee, either as user or admin, the employee is logged in or accordingly various privileges are granted to him to carry out various tasks through application.

The application makes sure of the security services and other privacy policies. Its grants privilege to various employees to perform their work as per hierarchy in the organization.

### 1.3 Technology Used

This project is implemented using Phone Gap technology. Phone gap is an open source framework for building cross-platform mobile applications with HTML, CSS and JavaScript. This is an ideal solution for web developers interested in mobile development. This is also an ideal solution for creation of an application that can run on multiple devices with the same code base.

Phone Gap supports a number of different mobile platforms, including:

- 1) Android
- 2) iPhone
- 3) Blackberry
- 4) Symbian
- 5) Palm

The Phone Gap SDK provides an API that is an abstraction layer providing the developer with access to hardware and platform specific features. As phone Gap abstracts the native mobile platform, the same code can be used on multiple mobile platforms with little or no change. Making an application available to a wider audience.

## PROBLEM ANALYSIS AND RELATED WORK

### 2.1 Existing system:

The current system is desktop where all the activities need to perform manually. The system takes a lot of time in performing different activities as all the activities are consolidated.

**Disadvantages in existing system:**

1) manual system 2) management in restricted to desktop 3) overhead of software installation 4) more hardware requirement 5) location of hr manager restrict the completion of any operation in time.

**2.2 proposed solution:**

The proposed system is to allow the HR work through an application using mobile app instead of desktop, using phone gap technology.

Phone gap is mobile development framework which enables to build the applications for mobile devices which are neither truly native nor purely web-based.

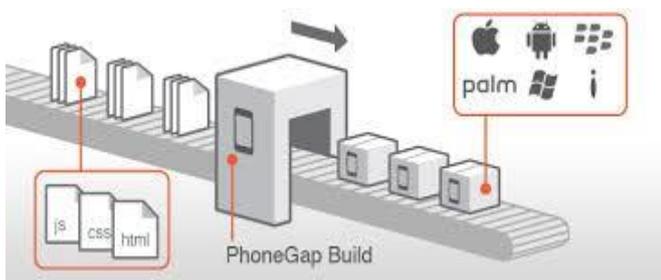
The system allows HR manager and employees to use the app- to request time off, view companies directories, org updates and many more via notification and respond as an alert messages.

**Advantages in proposed system:**

- 1) faster and best updating process
- 2) best service in its peak time
- 3) 24x7 availability
- 4) Data on head counts

**3 HOW DOES IT WORK?**

Build your app once with web-standards, based on HTML5, phone Gap leverages web technologies developers already know best. HTML and JavaScript. Wrap it with phone Gap. Using the free open source framework or phone gap uses standards-based web technologies to bridge web app and mobile devices.



**Figure 1:** how does it work?

Phone gap build enables you to upload a ZIP file containing the HTML5, CSS and JavaScript of your application.

Once the build process is complete, you may either download the deployment bundle and manually install it to your device or take a picture of a QR code on phone gap

build's and download the deployment package directly to your mobile device.

Phone gap build supports a feature name Hydration, which enables the application to download updates to the HTML, CSS, and JavaScript files whenever it launches.

**Plug-in development guide:**

Plug-ins provides access to device and platform functionality that is ordinarily unavailable to web-based apps. All the main Cordova API features are implemented as plug-ins, and many others are available that enable features such as bar code scanners, NFC communication, or to tailor calendar interface.

Plug-in comprise a sing JavaScript interface along with corresponding native code libraries for each supported platform.

**3.1 MODULES:**

**3.1.1 Employee management:**

Employee management system makes easy for the employer to keep a track of all the records.

This will manage the whole company employee details like their attendance, salary details, leave details. Even if the employee takes a leave then the software will deduct a one day leave from his casual or sick leave. , the attendance will be automatically etc.,

**3.1.2 Event management**

Event directors, even in relatively modest events, are human resource managers. The functions of the event director requires: 1) developing job descriptions 2) advertising positions 3) allocating work 4) training people for positions and 5) setting levels of pay.

**3.1.3 Career processing**

Job seeker will view the company website where HR updates the job posting time to time. Then job seeker uploads his resume if he want to apply for it. HR views all the candidates' resumes and selects the best candidate for the job. This career processing it done through online where there is no wastage of time for both the job seeker and the interviewer.

**3.3.4 Leave processing**

Leave management ensures that all leave taken and leave requests are properly accounted for. Office staffs can apply, approve and view leave records without the hassle and delay going through the admin staff. For manager, leave approval

no longer involve trails of paper work. The system provides full audit trails of your staffs' leave balances and plans.

#### 4. TESTING

The testing phase is an important part of software development. It is the process of finding process and missing operations and also a complete verification to determine whether the objectives are met and the user requirements are satisfied.

**Testing has to be done at four levels:**

1. Unit testing
2. Integration testing
3. Validation testing
4. System testing

**Table -1:** Sample Table module

Testing module				
Test ID	Test case name	Expected value	Actual value	Result
1	Authentication	1.run the application 2.all the fields should be field	1.value must be taken 2.next page should be displayed	Pass
2	Work management	1.run the application	1. Option must be taken. 2.Next page should be displayed	Pass
3	Employee management	1.run the application	1. emp id should be taken	Pass
4	Careers	1.run the application	1.value must be taken	pass

#### 5. CONCLUSIONS

Phone gap is a cross platform development framework

1. Based on HTML5, JavaScript.
2. Using web standards.

Phone gap may extended with the plug-in that enable the mobile developer to access Bluetooth, barcode scanning, push notification etc.,

HR management using phone gap is a small app that is being develop when there is a lack of human resources and the jobs are restricted to desktop.

#### 6. FUTURE WORK

Presently phone gap is working with the android and apple platform in future it may work with the other cross platform like windows, symbian, blackberry etc.,

HR is provided with many task like program training, recruitment, selection, wages and salary etc., which can be easily access through mobile irrespective of location.

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