

Employee management Login and CRUD operations

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Employee management Login and CRUD operations

Create an Employee management system which allows to do following operations:

1. Login Employee.
2. Add more Employee.
3. Edit Employee details.
4. Delete Employee records.
5. Validations.

System & technology used:

1. Operating System: Mac OSX High Sierra.
2. Eclipse Mars.
3. Tomcat 7
4. Java 8
5. JSF 2.x
6. Spring 4.x.x
7. Hibernate 4.x.x
8. Primefaces 5.x.x
9. JPA2
10. H2 database (in-memory) (also MySQL configurations available – currently commented out)
11. pom.xml file contains all the dependencies (as it's a maven project)

Below are brief implementation details:

1. To keep the task minimal, validations are kept minimal and no integration with other third party libraries are done; for example, spring security is not implemented, instead a simple Filter is used to check for loggedIn session attribute.
2. Also one Employee (not part of database record) is initially used as –
Username: admin
Password: admin

Any other username-password combination will give error message for the first time. Once admin adds other employee, those can be used to log in too.
3. After logged in, User can add new Employee (minimal validations are done) , edit records and delete. Duplicate checks are done. Password encrypted using md5 hash algorithm.
4. Once logged out, session will expire and any newly employee created can log in using their credentials.

Business logic

For login, general user checks are done in bean level only. The architecture follows basic mvc pattern.
Structure = Presentation Layer (JSF) → Service Layer(Spring) → Dao Layer (Hibernate)

CDI annotations are used

The service layer contains Transactional delegations via spring

The Dao layer does the persisting operation.

How to run:

1. On the root of the folder open terminal and type : mvn clean install (the project will build a employeemanagement .war file, incase maven is not available, a prebuild war file is attached)
2. Put the war file in tomcat7 or greater webapp folder.
3. Start tomcat server
4. Open Chrome → Type in the URL <http://localhost:8080/employeemanagement/>

Note :

The same demo is available online and is being committed into Github now:

Github : <https://github.com/imdadareeph/employeemanagement>

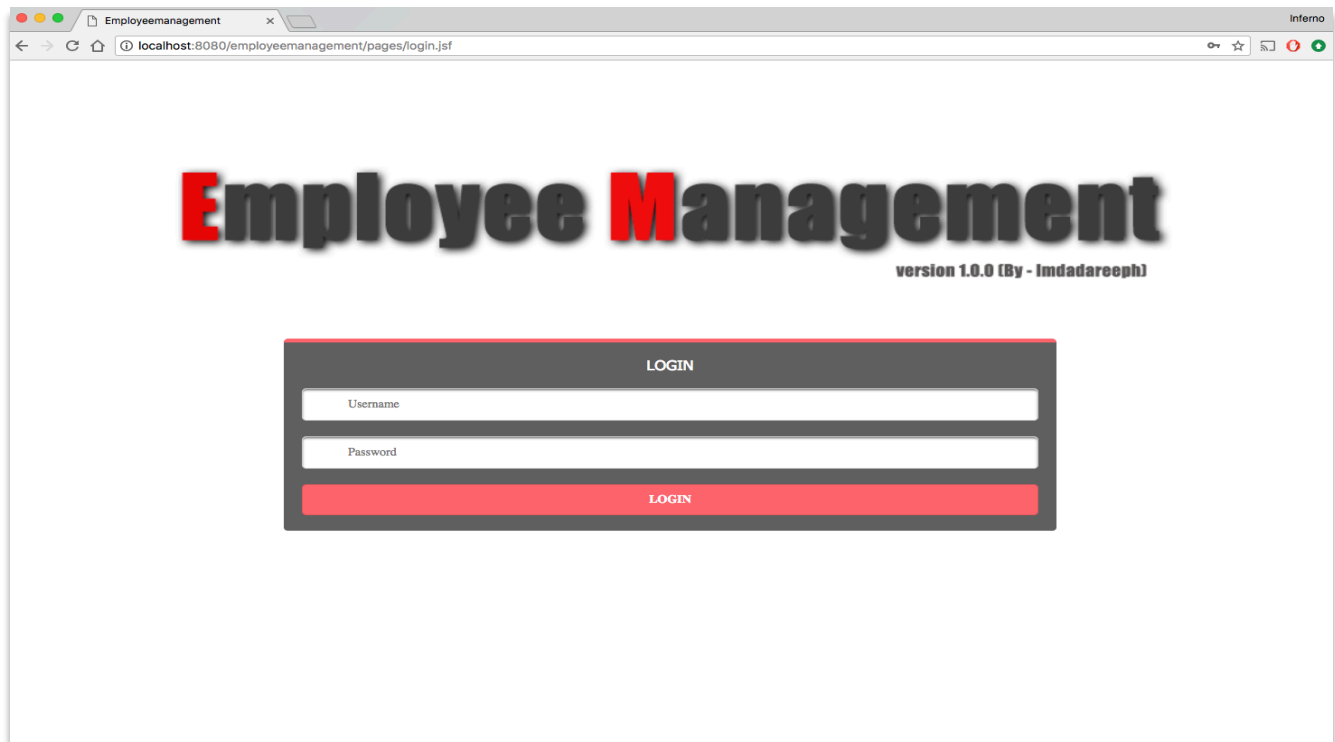
Live demo :

<http://employeemanagement.j.layershift.co.uk/>

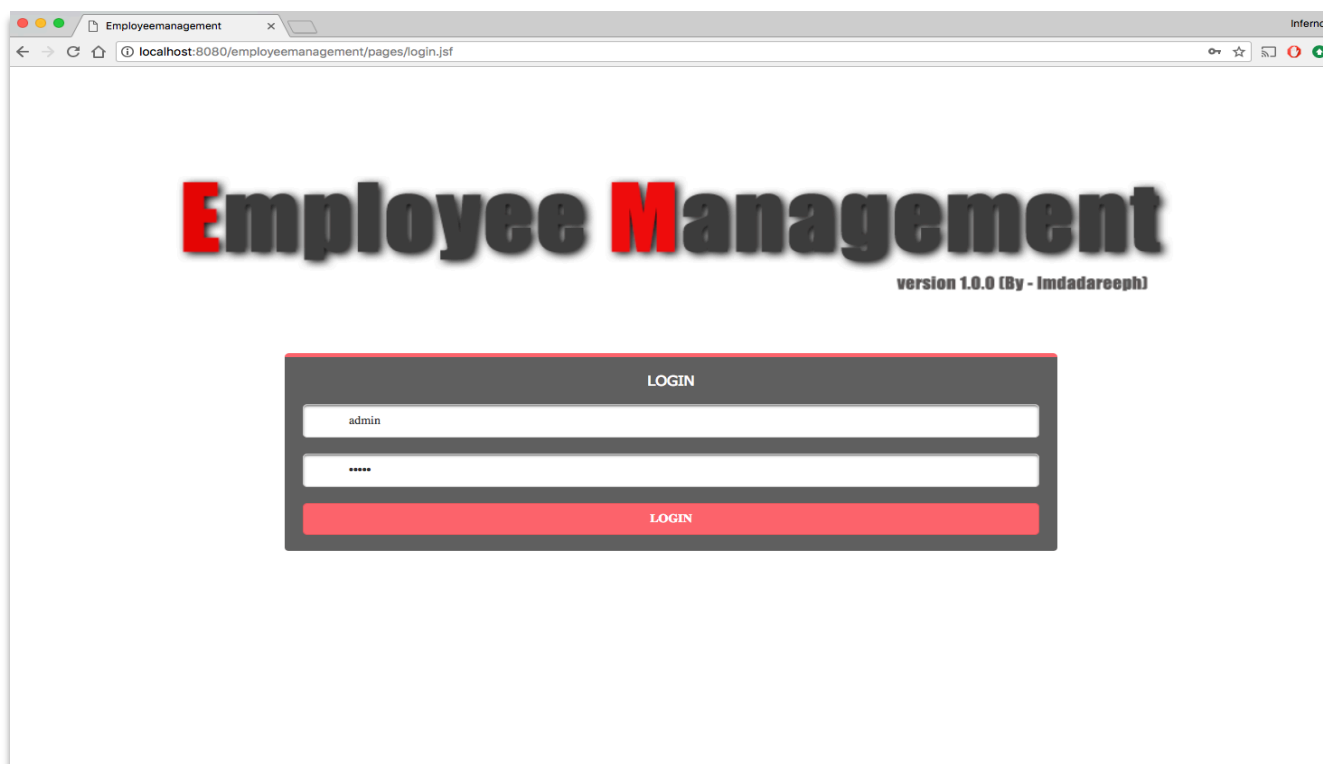
Screenshots are on next page.

Screenshots:

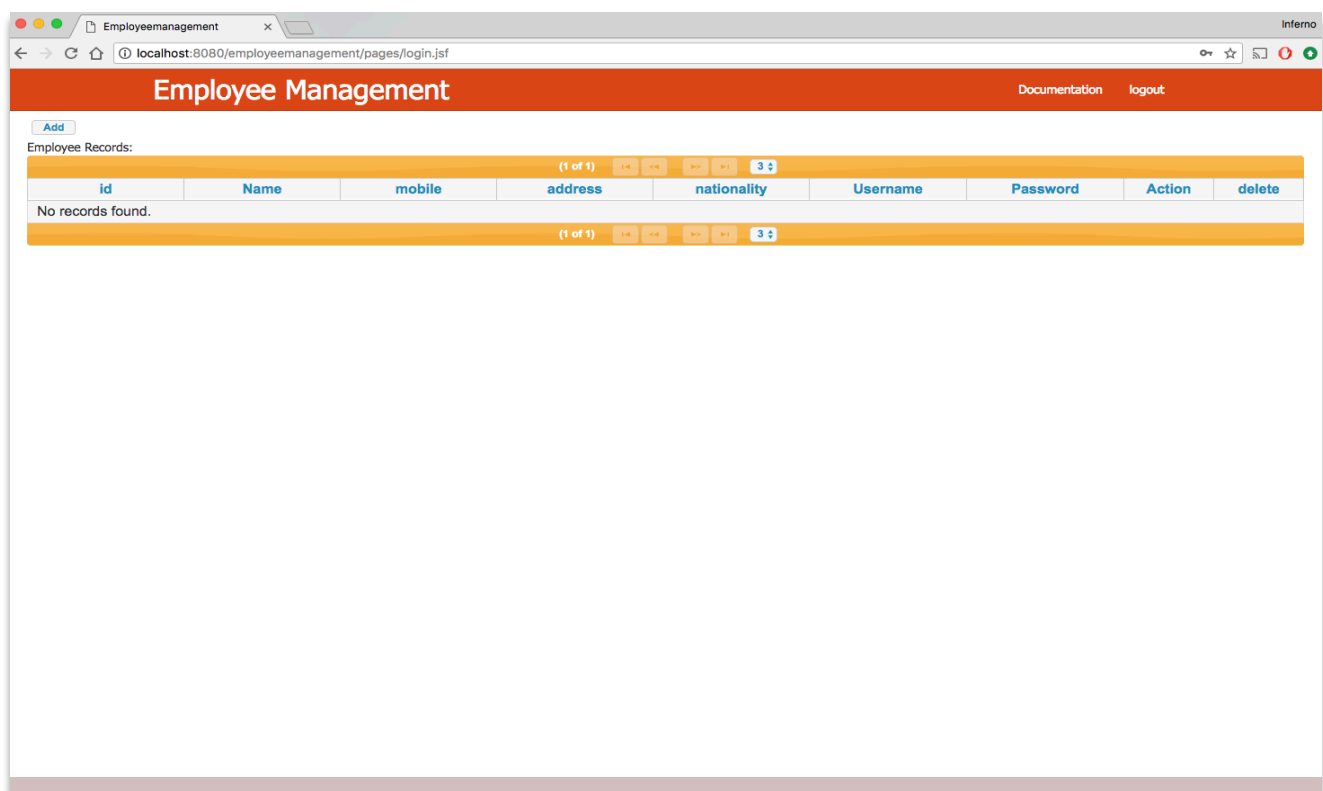
Open Chrome → Type in the URL <http://localhost:8080/employeemanagement/>



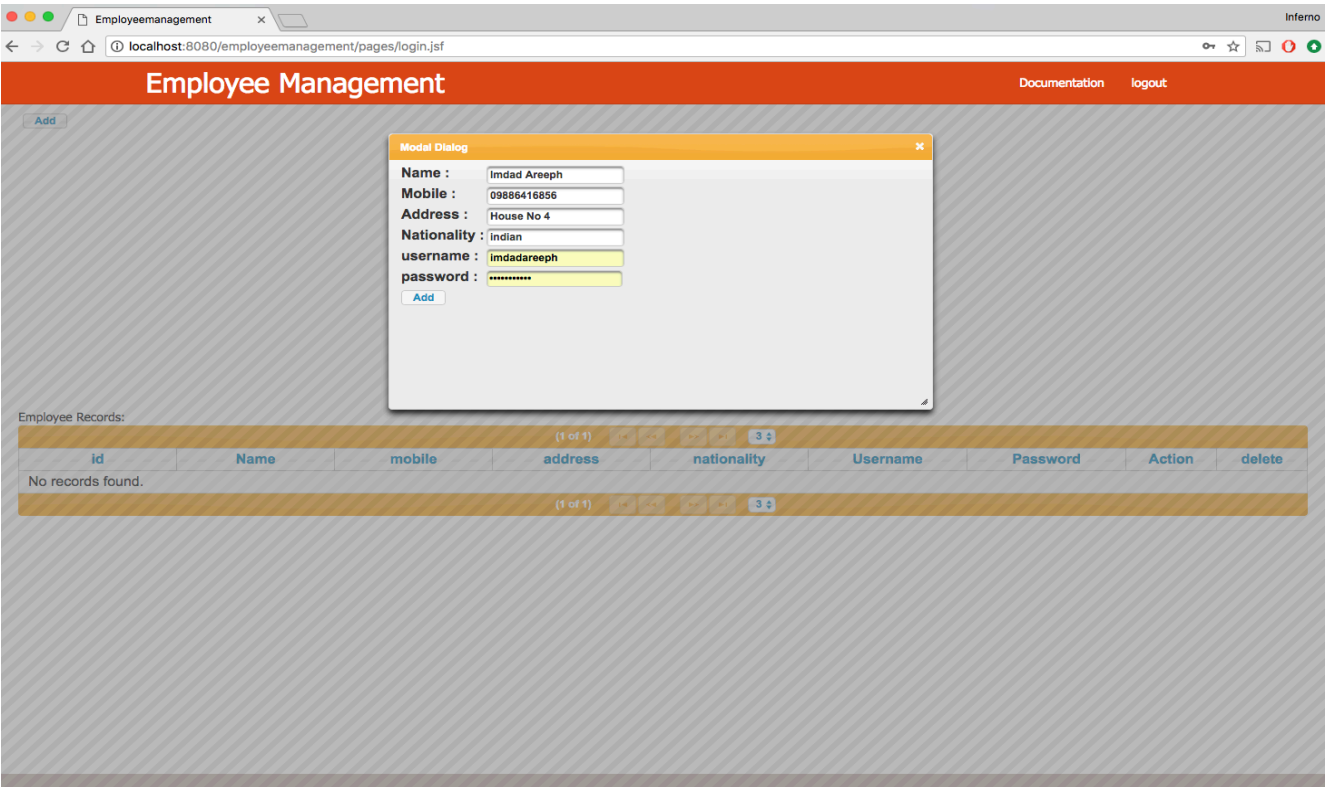
Give User credentials as User ID: **admin** and password: **admin**



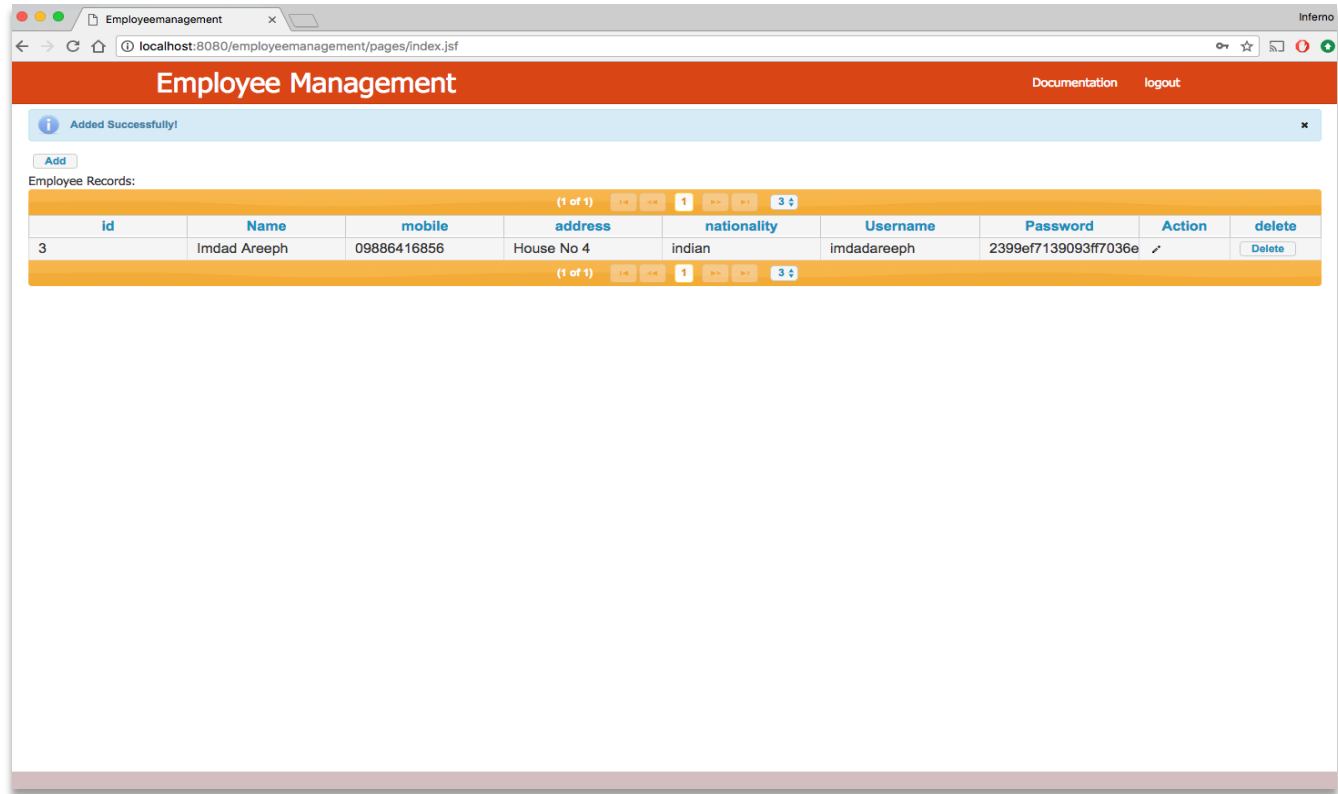
Initially there will be no records



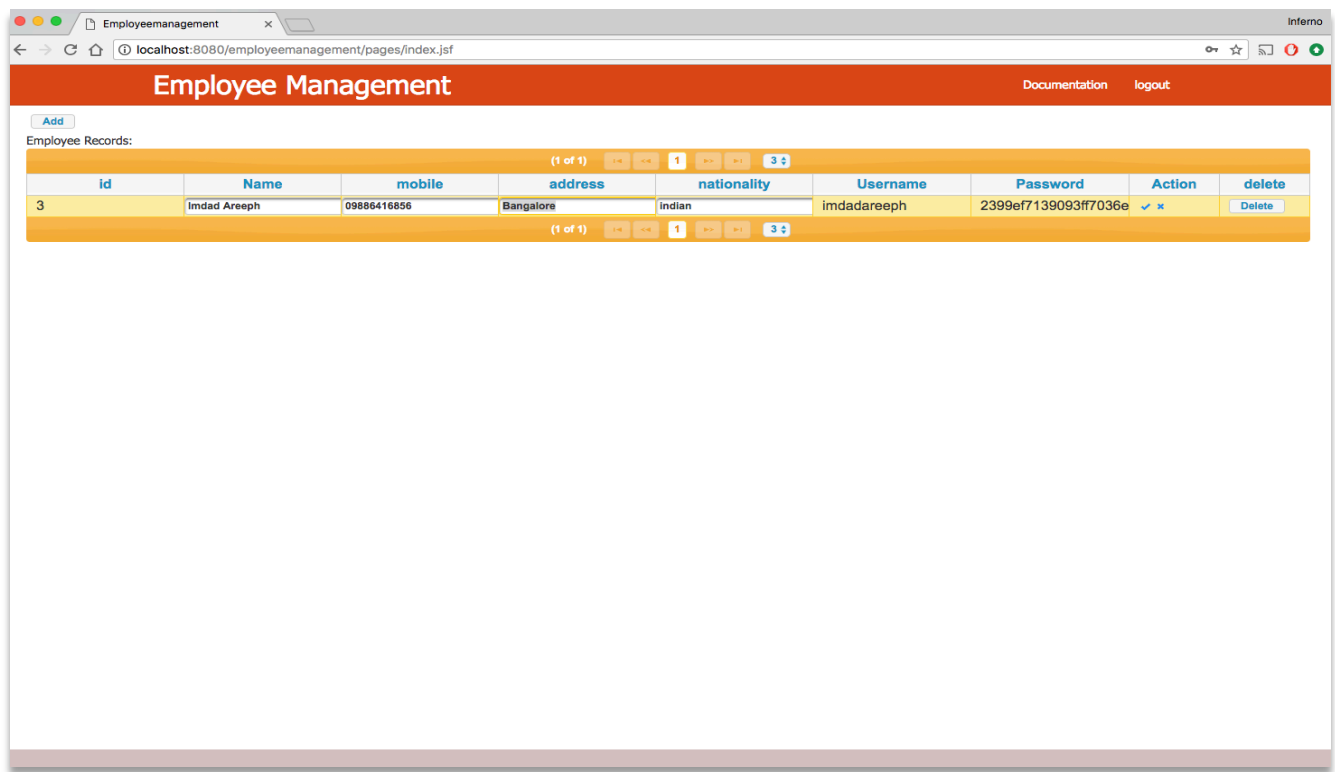
Add new Employee



Added successfully

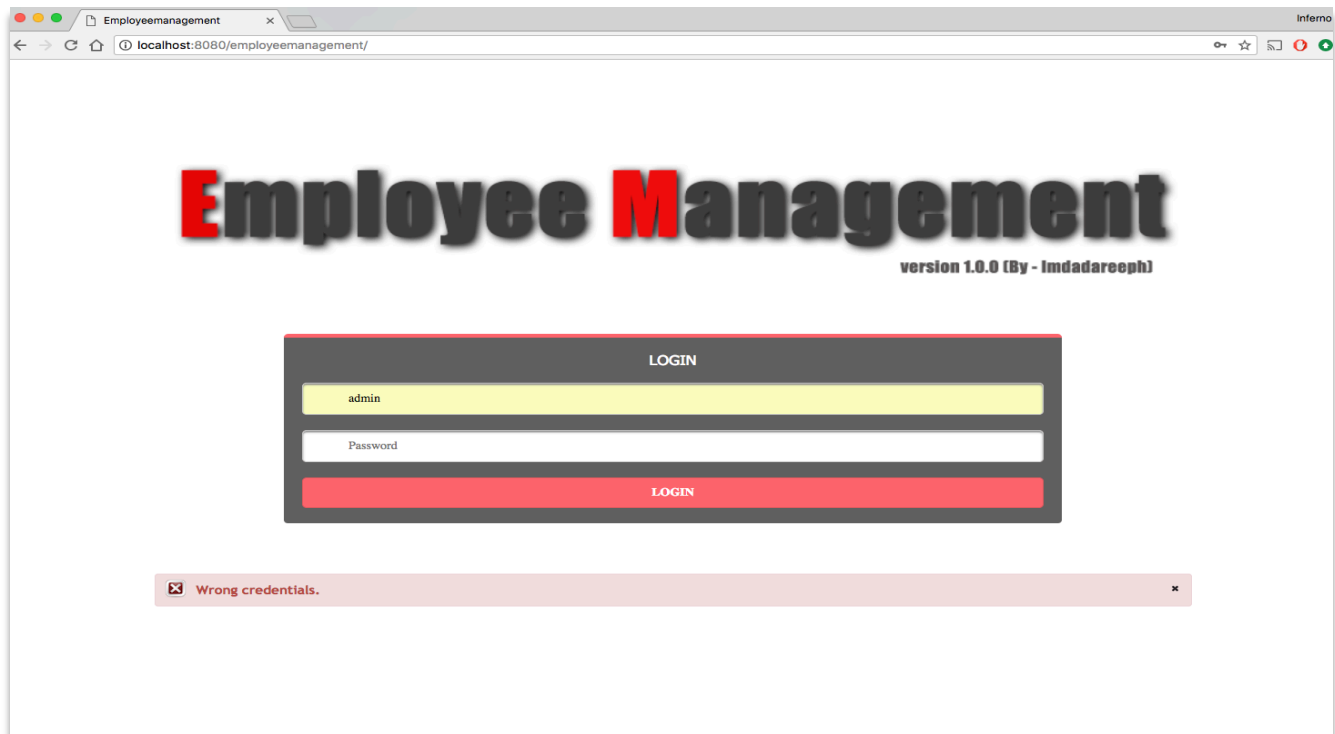


Edit Records



Validations :

Login validation



Edit validation

Employee Management

Documentationlogout

Username already exists

Add

Employee Records:

(1 of 1)123456789101112131415161718192021222324252627282930313233343536373839404142434445464748495051525354555657585960616263646566676869707172737475767778798081828384858687888990919293949596979899100101102103104105106107108109110111112113114115116117118119120121122123124125126127128129130131132133134135136137138139140141142143144145146147148149150151152153154155156157158159160161162163164165166167168169170171172173174175176177178179180181182183184185186187188189190191192193194195196197198199200201202203204205206207208209210211212213214215216217218219220221222223224225226227228229230231232233234235236237238239240241242243244245246247248249250251252253254255256257258259260261262263264265266267268269270271272273274275276277278279280281282283284285286287288289290291292293294295296297298299300301302303304305306307308309310311312313314315316317318319320321322323324325326327328329330331332333334335336337338339340341342343344345346347348349350351352353354355356357358359360361362363364365366367368369370371372373374375376377378379380381382383384385386387388389390391392393394395396397398399400401402403404405406407408409410411412413414415416417418419420421422423424425426427428429430431432433434435436437438439440441442443444445446447448449450451452453454455456457458459460461462463464465466467468469470471472473474475476477478479480481482483484485486487488489490491492493494495496497498499500501502503504505506507508509510511512513514515516517518519520521522523524525526527528529530531532533534535536537538539540541542543544545546547548549550551552553554555556557558559560561562563564565566567568569570571572573574575576577578579580581582583584585586587588589590591592593594595596597598599600601602603604605606607608609610611612613614615616617618619620621622623624625626627628629630631632633634635636637638639640641642643644645646647648649650651652653654655656657658659660661662663664665666667668669670671672673674675676677678679680681682683684685686687688689690691692693694695696697698699700701702703704705706707708709710711712713714715716717718719720721722723724725726727728729730731732733734735736737738739740741742743744745746747748749750751752753754755756757758759760761762763764765766767768769770771772773774775776777778779780781782783784785786787788789790791792793794795796797798799800801802803804805806807808809810811812813814815816817818819820821822823824825826827828829830831832833834835836837838839840841842843844845846847848849850851852853854855856857858859860861862863864865866867868869870871872873874875876877878879880881882883884885886887888889890891892893894895896897898899900901902903904905906907908909910911912913914915916917918919920921922923924925926927928929930931932933934935936937938939940941942943944945946947948949950951952953954955956957958959960961962963964965966967968969970971972973974975976977978979980981982983984985986987988989990991992993994995996997998999100010011002100310041005100610071008100910101011101210131014101510161017101810191020102110221023102410251026102710281029103010311032103310341035103610371038103910401041104210431044104510461047104810491050105110521053105410551056105710581059106010611062106310641065106610671068106910701071107210731074107510761077107810791080108110821083108410851086108710881089109010911092109310941095109610971098109911001100111002110031100411005110061100711008110091101011011110121101311014110151101611017110181101911020110211102211023110241102511026110271102811029110301103111032110331103411035110361103711038110391104011041110421104311044110451104611047110481104911050110511105211053110541105511056110571105811059110601106111062110631106411065110661106711068110691107011071110721107311074110751107611077110781107911080110811108211083110841108511086110871108811089110901109111092110931109411095110961109711098110991110011100111100211100311100411100511100611100711100811100911100111100211100311100411100511100611100711100811100911101011101111101211101311101411101511101611101711101811101911102011102111102211102311102411102511102611102711102811102911103011103111103211103311103411103511103611103711103811103911104011104111104211104311104411104511104611104711104811104911105011105111105211105311105411105511105611105711105811105911106011106111106211106311106411106511106611106711106811106911107011107111107211107311107411107511107611107711107811107911108011108111108211108311108411108511108611108711108811108911109011109111109211109311109411109511109611109711109811109911110011110011110021110031110041110051110061110071110081110091110101111011111012111013111014111015111016111017111018111019111020111021111022111023111024111025111026111027111028111029111030111031111032111033111034111035111036111037111038111039111040111041111042111043111044111045111046111047111048111049111050111051111052111053111054111055111056111057111058111059111060111061111062111063111064111065111066111067111068111069111070111071111072111073111074111075111076111077111078111079111080111081111082111083111084111085111086111087111088111089111090111091111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