MySQL Database (JPA Entities)

\*\*are not currently included in the uml diagram for various reasons

Employee

emp\_id <PK auto> (length =5 digit)

username: VARCHAR(10) string

password: VARCHAR(41) string (HASH)

first\_name: VARCHAR(32) string

last\_name: VARCHAR(32) string

email: VARCHAR(50) string

permission\_level: TINYINT(1) int (employee(1)/admin(2)/owner(3)) \*\*could be broken out into another table if there are “admins” who should be able to do some admin things but not others - would need a list of actions they should be able to perform\*\*

address: VARCHAR(50) string

city: VARCHAR(16) string

state: CHAR(2) string (dropdown select)

hire\_date: DATE

active: TINYINT(1) boolean (0 no, 1 yes)

Project

project\_id <PK auto> (length= 9 digit)

name: VARCHAR(64) string

vendor\_id <FK>

billing\_rate: DECIMAL(6,2) BigDecimal (vendor payrate)

client\_name: VARCHAR(64)

\*\*client\_location (address?)

Project-Employee

project\_id <FK> <PK>

emp\_id <FK> <PK>

pay\_rate: DECIMAL(6,2) BigDecimal (employee payrate)

date\_started: DATE Date

date\_ended: DATE Date

Vendor

vendor\_id <PK auto> (length = 5 digit)

name: VARCHAR(32) string

primary\_email: VARCHAR(50) string

contact\_name: VARCHAR(64) string

address: VARCHAR(50) string

city: VARCHAR(16) string

state: CHAR(2) string (dropdown select)

phone: CHAR(10) string

Timesheet

timesheet\_id <PK auto>

proj\_emp\_id <FK>

week\_starting: DATE Date

period: TINYINT(1) (weekly(1)/biweekly(2)) int

img\_url: VARCHAR(255) string

status: VARCHAR(13) string (not submitted, pending, verified, archived(>1 year))

no\_hours: TINYINT(1) int (<=max/week) (filled when timesheet is approved)

TimesheetRow

timesheet\_id <FK> <AK>

week\_no: <AK> TINYINT(1) (weekly(1)/biweekly(1 or 2)) int

hours\_1: TINYINT(1) default = 0; range = 0-7 int

hours\_2: TINYINT(1) default = 0; range = 0-7 int

hours\_3: TINYINT(1) default = 0; range = 0-7 int

hours\_4: TINYINT(1) default = 0; range = 0-7 int

hours\_5: TINYINT(1) default = 0; range = 0-7 int

hours\_6: TINYINT(1) default = 0; range = 0-7 int

hours\_7: TINYINT(1) default = 0; range = 0-7 int

Invoice

invoice\_id <PK auto>

vendor\_id <FK> (for addressing info)

\*\*timesheet\_ids SET array <FK> (list of associated timesheets for images)

period\_start: DATE Date

period\_end: DATE Date

payment\_due: DATE Date

\*\*recruiter: VARCHAR(?) (is this a reference to an employee or a person associated with a vendor? should it be stored in another table as well?)

rate: DECIMAL(6,2) BigDecimal (pulled from project table)

total\_hours: DECIMAL (5,2) double (sum of no\_hours from all associated timesheets)

total\_amt: DECIMAL(6,2) BigDecimal (rate \* total\_hours)

timestamp: TIMESTAMP java.sql.Timestamp (auto generated when record is created)

status: VARCHAR(13) string (draft, pending, paid, archived(>1 year))

values not saved: vendor and company billing information; consultant names, timesheet images

Paystub

paystub\_id <PK>

employee\_id <FK>

\*\*timesheet\_ids SET array <FK> (list of associated timesheets)

check\_no: SMALLINT(4) int

period\_start: DATE Date

period\_end: DATE Date

pay\_date: DATE Date

net\_pay: DECIMAL(6,2) BigDecimal (sum of pay\_rate\* no\_hours for each project they worked on that period)

timestamp: TIMESTAMP java.sql.Timestamp (auto generated when record is created)

\*\* following are subject to change based on the paystub format \*\*

ytd\_gross: DECIMAL(6,2) BigDecimal (calculated field)

ytd\_deductions: DECIMAL(6,2) BigDecimal (calculated field)

ytd\_net\_pay: DECIMAL(6,2) BigDecimal (calculated field)

total: DECIMAL(6,2) BigDecimal (calculated field)

deductions: DECIMAL(6,2) BigDecimal (calculated field)

values not saved: for each timesheet, pull employee pay rate, no\_hours to list in income section; deductions (if any) will be calculated based on that employee’s deduction status - may not be implemented;