



A Database Management System for Manufacturing Industries

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Course: 311 Database and Management Systems

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Introduction To Database Management Applications for Manufacturing Industries.

While Manufacturing industries locally maintain their DBMS for the supply chain, It is seen that the Implementation of such a system for large-scale manufacturing industries is yet to be achieved while international standard industries have adopted this scope of production advancement. A very few Industries operate by using relational databases at a local level.

Our Project is placed to wrestle with the idea of the tangibility of DBMS Systems for Industries.

Project Overview

Goals

1. Establishment of the narrative that Industry Operations are Fluid with a Database.

One Fine reason why most medium to small-scale industries doesn't adopt maintaining a database is the idea that management is executable manually. As of today, industrial warehousing is done with pen and paper while it gets the job done. But it holds the value of relating the data.

2. Scope of Production upscale.

Factories that operate under manually noted data have to spend large amounts of time tracking data and the idea that eventually it has to be processed by humans only. This makes the job more tedious and Error-prone.

Having a Database can let the operations team Go through a major amount of data in a much more meaningful way. Additionally if implemented right a DBMS can generate reports based on pre-existing data. As well as Predict material Shortage.

3. Order Tracking

One big Problem the proposed client faces is the idea that Industries fail to deliver products on due time. This is primarily because Socially managed operations are error-prone and inaccurate. Additionally, Manufacturing Industries require a multitude of suppliers to Deliver materials to maintain the system.

Scope of the Work.

As mentioned above Industries that this project addresses are going to be unique and ranging in different operation cultures but the core idea remains the same which is the idea of collecting data and making it meaningful with accuracy.

As of today, there are at least 5000 factories large Scale import or Export are running without a DBMS and the very few that are using either running with a generalized DBMS or a primitive idea of maintaining.

Once The project's narrative of Data Management is established in the field inevitably this industry has to rely on such a system to upscale their chances of success. The leverage of Technology within Data is increasing along with the want of Efficiency of Manufacturing industries.

While in a Microeconomic Perspective DBMS aids a handful of industries. A well-injected application of this project can technically increase the Export Capacity of The country. This raises one more question, The importance of Developers and IT personnel within this Area of interest and how any organization that deals with Manufacturing can benefit from such a Group of Experts.

Example of local manufacturing industries relying on pen and paper datasheets.

Bata

WORKSHOP PRODUCTION BALANCE - ASSEMBLY

Dept. 422-A+B Incharge MR. S. HOSSAIN Date 13/10/11

Cancelled Plans	% of Plan Distribution	Actual Plans						Total Pairs
		1425	1426	1427	1428	1429	1430	
Manipulated	50%							
In Prefab	100%							
Before Sewing	50%	2000	4000					6000
In Sewing Curve	100%			1000				1000
Finished Uppers	.....Pis			1000				1000
Before Lasting	.....Pis				1750			1750
Injected	.....Pis				250			250
Packed in Whse	.....Pis				1000			1000
Despatched	100%					3000		3000
Total		2000	4000	2000	3000	3000		14000

Despatched Today	Plan Pairs	1421	1422	Despatched This Week	Plan Pairs	1419	1415	1412	1411	Total
	3000				3000	3000	4000	3000		13000
	0.3				0.3	0.3	0.4	0.3		1.3

PREPARATION OF MATERIAL FOR NEXT SHIFT / DAY

Type of Material	Plan	1422	1427	1428	Uppers	Insole	Box	Toepuff	Solelast	Sundry Materials				
										Box	Lace	ClCase	TTPaper	
Actual	3000	3000	3000	3000										
Delayed	1000	1000												2000

HOURLY PRODUCTION PROGRESS

Overseer Started At 6:27 Stopped At 2:57
Operators Allowed 33 Operators Present 33

Hour	Est.	Act.	Behind	Reason	Hour	Est.	Act.	Behind	Reason	Hour	Est.	Act.	Behind	Reason
6-7	330	325	-5		2-3	330	325	-5						
7-8	330	330	-		3-4	330	330	-						
8-9	330	335	+5		4-5	330	335	+5						
9-10	330	330	-		5-6	330	325	-5						
10-11	330	325	-5		6-7	330	330	-						
11-12	330	330	-		7-8	330	335	+5						
12-1	330	335	+5		8-9	330	335	+5						
1-2	330	335	+5		9-10	330	335	+5						
Total	2550	2550	+0		Total	2550	2550	+0		Total				

Signature: [Signature] Date: 13/10/11
Production Supdt. [Signature] Date: 13/10/11

STOCK CARD SYSTEM

The Stock Card includes the following information:

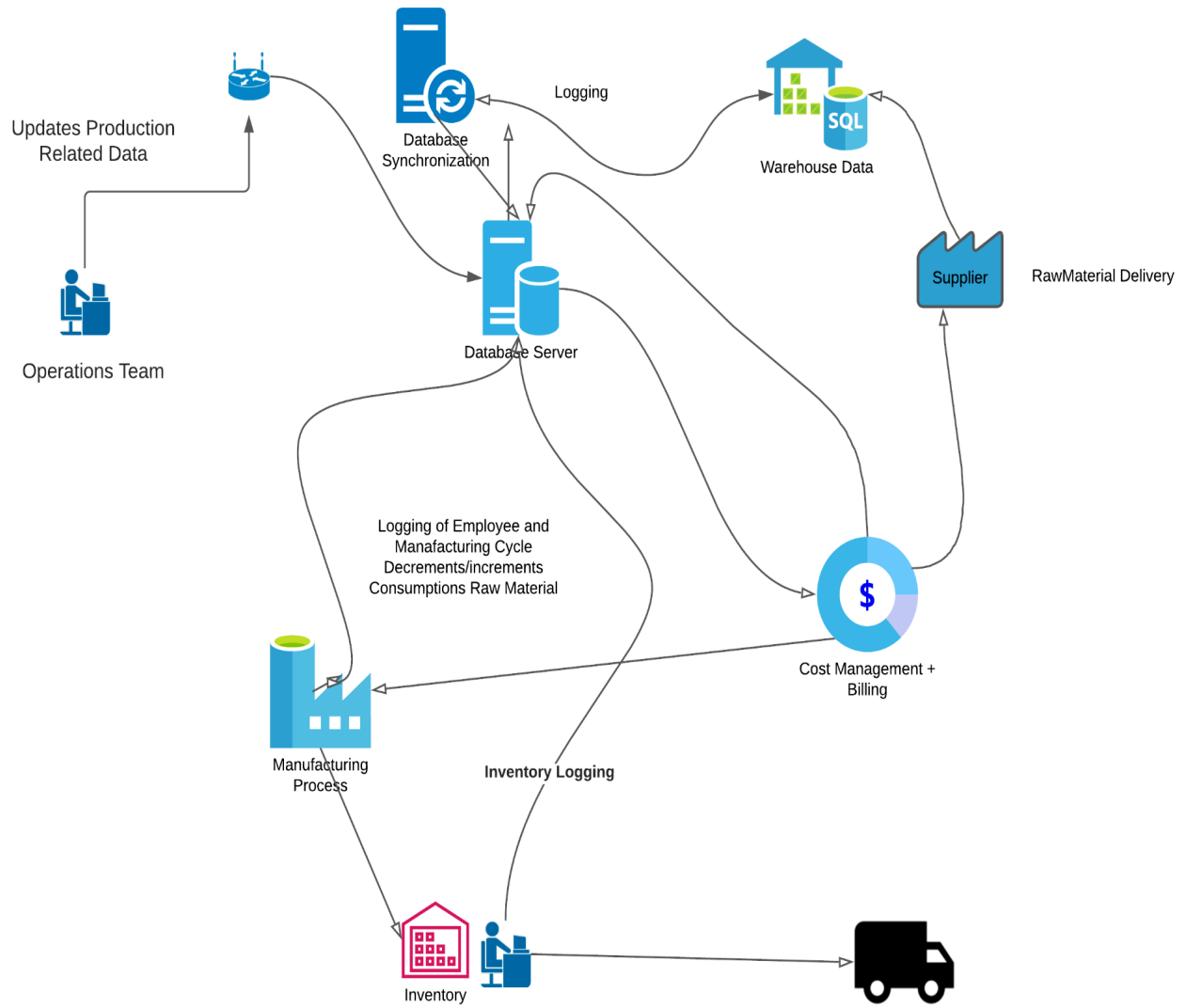
- | | |
|------------------------------------|---|
| (1) Supplier | The tanner or agent involved. |
| (2) Price | The price of the material when the style was costed. |
| (3) Unit | Per sq. foot |
| (4) Date | Date of ordering material
Date of receiving material |
| (5) Order No. | Order Number |
| (6) (Ordered)
(Price/Quantity) | (a) The price of the material when ordered may be different to the costed price and will represent a gain or loss.

(b) The quantity ordered. |
| (7) (Received)
(Quantity) | This represents the amount received on a specific order. |
| (8) Balance on order | This represents the amount outstanding on the order. |
| (9) Stock | It represents the amount of this type of leather in the leather store. |
| (10) Issued | It illustrates the amount issued each day during the week. |
| (11) (Week ending)
(Quantity) | This represents the total quantity issued throughout the week. |
| (12) Remarks | Quality of leather, size of skins, colour |

HOURLY PRODUCTION RECORD

PAC TO RY RD LARLY PRODUCTION														DAY 1		WK 46		2009																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
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0	1201	1202	1203	1204	1205	1206	1207	1208	1209	1210	1211	1212	1213	1214	1215	1216	1217	1218	1219	1220	1221	1222	1223	1224	1225	1226	1227	1228	1229	1230	1231	1232	1233	1234	1235	1236	1237	1238	1239	1240	1241	1242	1243	1244	1245	1246	1247	1248	1249	1250	1251	1252	1253	1254	1255	1256	1257	1258	1259	1260	1261	1262	1263	1264	1265	1266	1267	1268	1269	1270	1271	1272	1273	1274	1275	1276	1277	1278	1279	1280	1281	1282	1283	1284	1285	1286	1287	1288	1289	1290	1291	1292	1293	1294	1295	1296	1297	1298	1299	1300	1301	1302	1303	1304	1305	1306	1307	1308	1309	1310	1311	1312	1313	1314	1315	1316	1317	1318	1319	1320	1321	1322	1323	1324	1325	1326	1327	1328	1329	1330	1331	1332	1333	1334	1335	1336	1337	1338	1339	1340	1341	1342	1343	1344	1345	1346	1347	1348	1349	1350	1351	1352	1353	1354	1355	1356	1357	1358	1359	1360	1361	1362	1363	1364	1365	1366	1367	1368	1369	1370	1371	1372	1373	1374	1375	1376	1377	1378	1379	1380	1381	1382	1383	1384	1385	1386	1387	1388	1389	1390	1391	1392	1393	1394	1395	1396	1397	1398	1399	1400	1401	1402	1403	1404	1405	1406	1407	1408	1409	1410	1411	1412	1413	1414	1415	1416	1417	1418	1419	1420	1421	1422	1423	1424	1425	1426	1427	1428	1429	1430	1431	1432	1433	1434	1435	1436	1437	1438	1439	1440	1441	1442	1443	1444	1445	1446	1447	1448	1449	1450	1451	1452	1453	1454	1455	1456	14

System Architecture



Tools Used :




1. DB ,PHP SQL
2. HTML,Bootstrap js
3. Cloud Services : AWS
4. For MultiPlatform the Entire Project Can be Implemented Using React Native.

Front-End Development and Plans

Front-end Contents

1. Registration.
2. Login Pages and Logout Pages for Operation Managers for each unique site.
3. Client Table
4. Item Details Page.
5. Admin Dashboard
6. Raw Material Scheduling Page
7. Update Page for raw material warehousing
8. Production Unit Logging and Uptime Page.
9. Task Scheduling
10. Bill generation/Costing for suppliers and shippers.

Register Form

	<input type="text" value="Username"/>
	<input type="text" value="Email"/>
	<input type="text" value="Password"/>
<input type="button" value="Register"/>	

Client List

Search for names. .	
Name	Company
Alfreds Futterkiste	Marks and Spencer
Berghunds snabbkop	Nike
Island Trading	Bata
Koniglich Essen	apex
Laughing Bacchus Winecellars	AB shoes
Magazzini Alimentari Riuniti	bashundhara shoes
North/South	new balance
Paris specialites	bay

Inventory Update

Material Name :

Enter Product name

Quantity / Weight

No. weight

Raw Material For :

MS001 : Men Shoe

MS001 : Men Shoe

CB001 : Children's Bag

LB001 : Ladies bag

Register New Product

Input Details Regarding the Order At hand

Product :

☐ LB001 : Brown Leather wallet [Females]

Quantity :

☐ MS001 : Men's Show Black

Quantity :

☐ CB001 : Children's Bag

Quantity :

To be Shipped

Client Information :

New Client For this Case

Generate Payment Order

Select the Appropriate changes that you want to make

Client Update Form

Order Placement Form

Payment Slip

Inventory

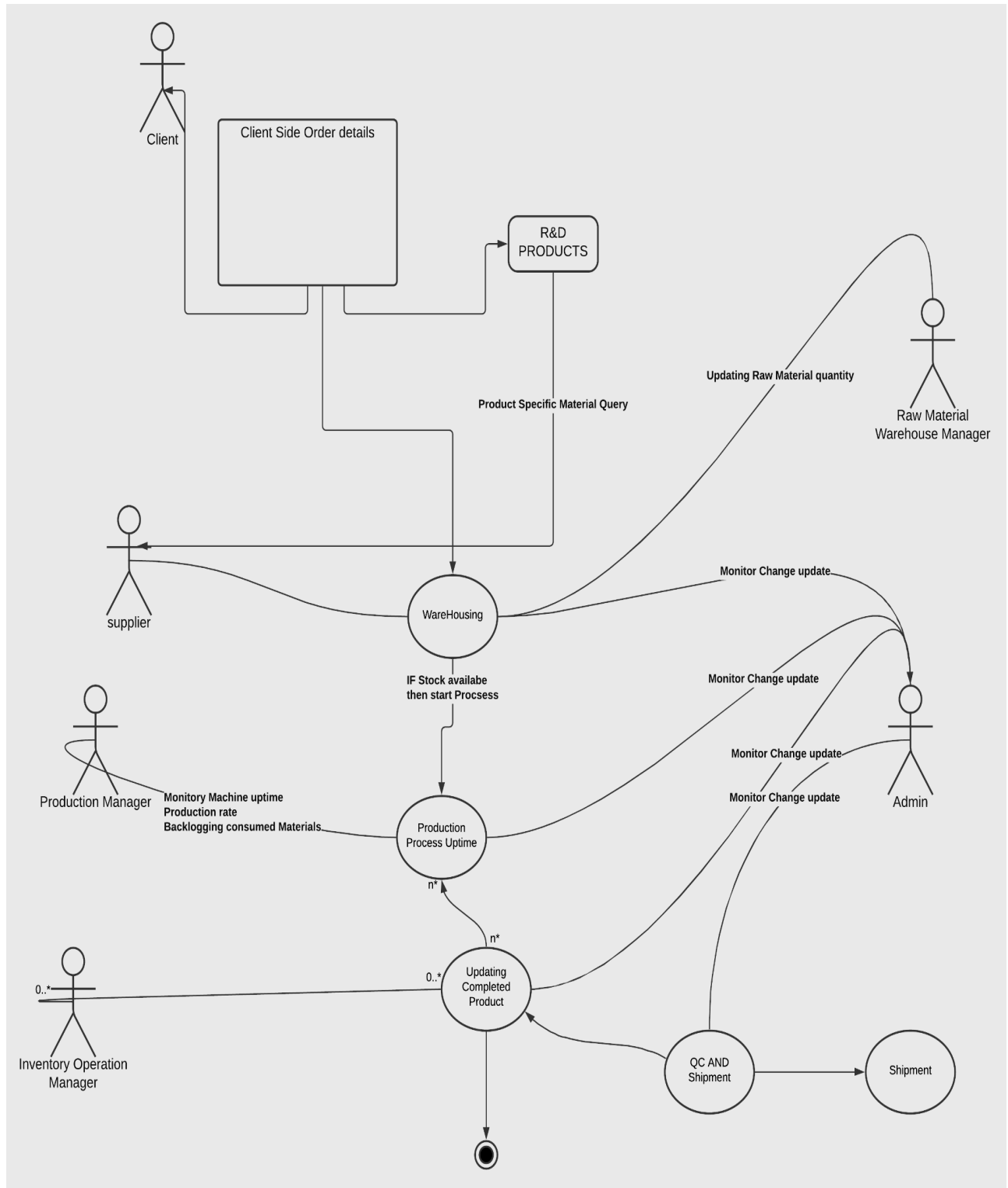
Employee Management

Register New Product

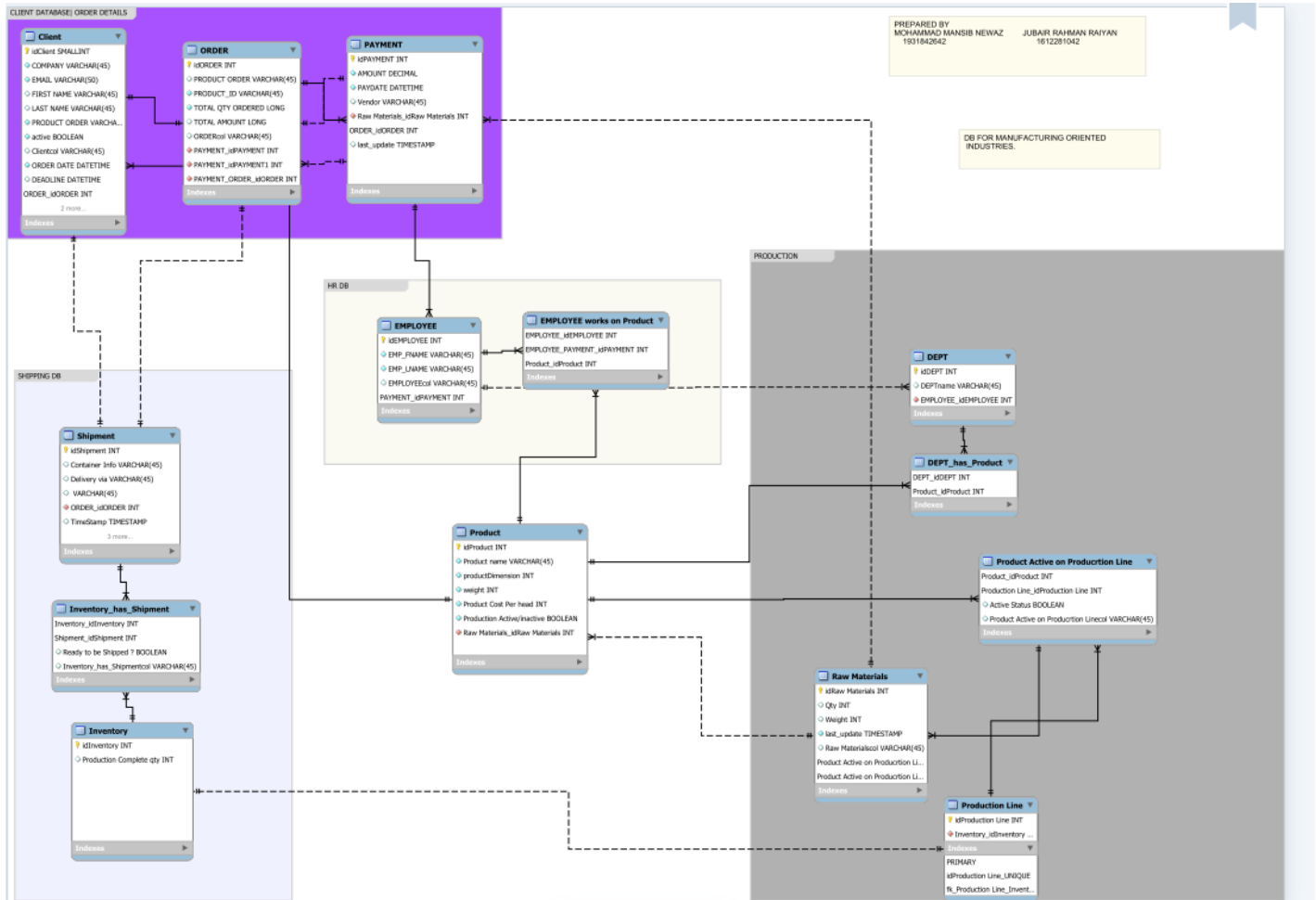
View Database :

Client List

4.Product Use Case Diagrams.



ERD REVISED



Database Design

Product Table

```
CREATE TABLE IF NOT EXISTS `mydb`.`product` (  
  `idproduct` INT NOT NULL,  
  `product_name` VARCHAR(45) NOT NULL,  
  `weight` VARCHAR(45) NOT NULL,  
  `dimension` VARCHAR(45) NOT NULL,  
  `status` TINYINT NOT NULL,  
  `productcol` VARCHAR(45) NOT NULL,  
  `Raw_Material_idRaw_Material` INT NOT NULL,  
  PRIMARY KEY (`idproduct`),  
  INDEX `fk_product_Raw_Material1_idx` (`Raw_Material_idRaw_Material` ASC)  
VISIBLE,  
  CONSTRAINT `fk_product_Raw_Material1`  
    FOREIGN KEY (`Raw_Material_idRaw_Material`)  
    REFERENCES `mydb`.`Raw_Material` (`idRaw_Material`)  
    ON DELETE NO ACTION  
    ON UPDATE NO ACTION)  
ENGINE = InnoDB
```

```
-- -----  
-- Table `mydb`.`Managers`  
-- -----
```

```

CREATE TABLE IF NOT EXISTS `mydb`.`Managers` (
    `idManagers` INT NOT NULL,
    `fname` VARCHAR(45) NULL,
    `lname` VARCHAR(45) NULL,
    `email` VARCHAR(45) NULL,
    PRIMARY KEY (`idManagers`))
ENGINE = InnoDB;

```

```

CREATE TABLE IF NOT EXISTS `mydb`.`Order` (
    `idOrder` INT NOT NULL,
    `quantity` INT NULL,
    `cost` INT NULL,
    `Date` TIMESTAMP NULL,
    `Buyer_idBuyer` INT NOT NULL,
    `product_idproduct` INT NOT
NULL,
    PRIMARY KEY (`idOrder`,
`Buyer_idBuyer`, `product_idproduct`),
    INDEX `fk_Order_Buyer_idx` (`Buyer_idBuyer` ASC) VISIBLE,
    INDEX `fk_Order_product1_idx` (`product_idproduct` ASC) VISIBLE,
    CONSTRAINT `fk_Order_Buyer`
    FOREIGN KEY (`Buyer_idBuyer`)
    REFERENCES `mydb`.`Buyer` (`idBuyer`)
    ON DELETE NO ACTION
    ON UPDATE NO ACTION,
    CONSTRAINT `fk_Order_product1`
    FOREIGN KEY (`product_idproduct`)
    REFERENCES `mydb`.`product` (`idproduct`)
    ON DELETE NO ACTION
    ON UPDATE NO ACTION)
ENGINE = InnoDB;

```



```
-- -----  
-- Table `mydb`.`ProductionStatus`  
-- -----
```

```
CREATE TABLE IF NOT EXISTS `mydb`.`ProductionStatus` (  
  
  `idProductionStatus` INT NOT NULL,  
  
  `product_idproduct` INT NOT NULL,  
  
  `Raw_Material_idRaw_Material` INT NOT NULL,  
  
  `Inventory_idInventory` INT NOT NULL,  
  
                                     PRIMARY KEY  
(`idProductionStatus`, `product_idproduct`, `Raw_Material_idRaw_Material`,  
  `Inventory_idInventory`),  
  INDEX `fk_ProductionStatus_product1_idx` (`product_idproduct` ASC)  
  VISIBLE,  
  INDEX `fk_ProductionStatus_Raw_Material1_idx`  
(`Raw_Material_idRaw_Material` ASC) VISIBLE,  
  INDEX `fk_ProductionStatus_Inventory1_idx` (`Inventory_idInventory`  
  ASC) VISIBLE,  
  CONSTRAINT `fk_ProductionStatus_product1`  
  FOREIGN KEY (`product_idproduct`)  
  REFERENCES `mydb`.`product` (`idproduct`)  
  ON DELETE NO ACTION  
  ON UPDATE NO ACTION,  
  CONSTRAINT `fk_ProductionStatus_Raw_Material1`  
  FOREIGN KEY (`Raw_Material_idRaw_Material`)  
  REFERENCES `mydb`.`Raw_Material` (`idRaw_Material`)  
  ON DELETE NO ACTION  
  ON UPDATE NO ACTION,  
  CONSTRAINT `fk_ProductionStatus_Inventory1`  
  FOREIGN KEY (`Inventory_idInventory`)  
  REFERENCES `mydb`.`Inventory` (`idInventory`)  
  ON DELETE NO ACTION  
  ON UPDATE NO ACTION)  
  ENGINE = InnoDB;
```

```
-- -----  
-- Table `mydb`.`Raw_Material`  
-- -----
```

```

CREATE TABLE IF NOT EXISTS `mydb`.`Raw_Material` (
    `idRaw_Material` INT
NOT NULL,
    `Quantity` INT NULL,
    `Cost` INT NULL,
    `Raw_Materialcol`
VARCHAR(45) NULL,
    `product_idproduct` INT NOT NULL,
    PRIMARY KEY (`idRaw_Material`),
    INDEX `fk_Raw_Material_product1_idx` (`product_idproduct` ASC) VISIBLE,
    CONSTRAINT `fk_Raw_Material_product1`
    FOREIGN KEY (`product_idproduct`)
    REFERENCES `mydb`.`product` (`idproduct`)
    ON DELETE NO ACTION
    ON UPDATE NO ACTION)
ENGINE = InnoDB;

```

```

-----
-- Table `mydb`.`Supplier`
-----

```

```

CREATE TABLE IF NOT EXISTS `mydb`.`Supplier` (
    `idSupplier` INT NOT NULL,
    `Name` VARCHAR(45) NOT
NULL,
    `Raw_Material_idRaw_Material` INT NOT NULL,
    PRIMARY KEY (`idSupplier`, `Raw_Material_idRaw_Material`),
    INDEX `fk_Supplier_Raw_Material1_idx` (`Raw_Material_idRaw_Material`
ASC) VISIBLE,
    CONSTRAINT `fk_Supplier_Raw_Material1`
    FOREIGN KEY (`Raw_Material_idRaw_Material`)
    REFERENCES `mydb`.`Raw_Material` (`idRaw_Material`)
    ON DELETE NO ACTION
    ON UPDATE NO ACTION)
ENGINE = InnoDB;

```

```

-----
-- Table `mydb`.`product`
-----

```

```

CREATE TABLE IF NOT EXISTS `mydb`.`product` (
    `idproduct` INT NOT NULL,

```

```

        `product_name` VARCHAR(45)
NOT NULL,
    `weight` VARCHAR(45) NOT NULL,
    `dimension` VARCHAR(45) NOT NULL,
    `status` TINYINT NOT NULL,
    `productcol` VARCHAR(45) NOT NULL,
    `Raw_Material_idRaw_Material` INT NOT NULL,
    PRIMARY KEY (`idproduct`),
    INDEX `fk_product_Raw_Material1_idx` (`Raw_Material_idRaw_Material`
ASC) VISIBLE,
    CONSTRAINT `fk_product_Raw_Material1`
    FOREIGN KEY (`Raw_Material_idRaw_Material`)
    REFERENCES `mydb`.`Raw_Material` (`idRaw_Material`)
    ON DELETE NO ACTION
    ON UPDATE NO ACTION)
ENGINE = InnoDB;

```

```

-----
-- Table `mydb`.`shippingInfo`
-----

```

```

CREATE TABLE IF NOT EXISTS `mydb`.`shippingInfo` (
        `id` INT NOT NULL,
        `agentId` VARCHAR(45)
NULL,
    `orderno` INT NULL,
    `dateTime` TIMESTAMP NULL,
    `quantity` INT NULL,
    `cost` INT NULL,
    PRIMARY KEY (`id`))
ENGINE = InnoDB;

```

```

-----
-- Table `mydb`.`table1`
-----

```

```

CREATE TABLE IF NOT EXISTS `mydb`.`table1` (
)
ENGINE = InnoDB;

```

```

-----
-- Table `mydb`.`table2`
-----

```

```
-----  
CREATE TABLE IF NOT EXISTS `mydb`.`table2` (  
)
```

```
ENGINE = InnoDB;
```

```
USE `dbms` ;
```

```
-----  
-- Table `dbms`.`users`  
-----
```

```
CREATE TABLE IF NOT EXISTS `dbms`.`users` (  
  `id` BIGINT(20) NOT NULL,  
  `user_id` BIGINT(20) NOT NULL,  
  `user_name` VARCHAR(100) NOT NULL,  
  `password` VARCHAR(100) NOT NULL,  
  PRIMARY KEY (`id`),  
  INDEX `user_id` (`user_id` ASC) VISIBLE,  
  INDEX `id` (`id` ASC) VISIBLE,  
  INDEX `user_name` (`user_name` ASC) VISIBLE,  
  INDEX `password` (`password` ASC) VISIBLE,  
  INDEX `password_2` (`password` ASC) VISIBLE)  
ENGINE = InnoDB  
DEFAULT CHARACTER SET = utf8mb4;
```

```
USE `phpmyadmin` ;
```

```
-----  
-- Table `phpmyadmin`.`pma__bookmark`  
-----
```

```
CREATE TABLE IF NOT EXISTS `phpmyadmin`.`pma__bookmark` (  
  `id` INT(10) UNSIGNED NOT NULL AUTO_INCREMENT,  
  `dbase` VARCHAR(255) NOT NULL DEFAULT '',  
  `user` VARCHAR(255) NOT NULL DEFAULT '',  
  `label` VARCHAR(255) CHARACTER SET 'utf8' NOT NULL DEFAULT '',  
  `query` TEXT NOT NULL,  
  PRIMARY KEY (`id`))  
ENGINE = InnoDB  
DEFAULT CHARACTER SET = utf8  
COLLATE = utf8_bin  
COMMENT = 'Bookmarks';  
-----
```

```
-- Table `phpmyadmin`.`pma__central_columns`
```

```
-----  
CREATE TABLE IF NOT EXISTS `phpmyadmin`.`pma__central_columns` (  
  `db_name` VARCHAR(64) NOT NULL,  
  `col_name` VARCHAR(64) NOT NULL,  
  `col_type` VARCHAR(64) NOT NULL,  
  `col_length` TEXT NULL DEFAULT NULL,  
  `col_collation` VARCHAR(64) NOT NULL,  
  `col_isNull` TINYINT(1) NOT NULL,  
  `col_extra` VARCHAR(255) NULL DEFAULT '',  
  `col_default` TEXT NULL DEFAULT NULL,  
  PRIMARY KEY (`db_name`, `col_name`))  
ENGINE = InnoDB  
DEFAULT CHARACTER SET = utf8  
COLLATE = utf8_bin  
COMMENT = 'Central list of columns';
```

```
-----  
-- Table `phpmyadmin`.`pma__column_info`
```

```
-----  
CREATE TABLE IF NOT EXISTS `phpmyadmin`.`pma__column_info` (  
  `id` INT(5) UNSIGNED NOT NULL AUTO_INCREMENT,  
  `db_name` VARCHAR(64) NOT NULL DEFAULT '',  
  `table_name` VARCHAR(64) NOT NULL DEFAULT '',  
  `column_name` VARCHAR(64) NOT NULL DEFAULT '',  
  `comment` VARCHAR(255) CHARACTER SET 'utf8' NOT NULL DEFAULT '',  
  `mimetype` VARCHAR(255) CHARACTER SET 'utf8' NOT NULL DEFAULT '',  
  `transformation` VARCHAR(255) NOT NULL DEFAULT '',  
  `transformation_options` VARCHAR(255) NOT NULL DEFAULT '',  
  `input_transformation` VARCHAR(255) NOT NULL DEFAULT '',  
  `input_transformation_options` VARCHAR(255) NOT NULL DEFAULT '',  
  PRIMARY KEY (`id`),  
  UNIQUE INDEX `db_name` (`db_name` ASC, `table_name` ASC, `column_name`  
ASC) VISIBLE)  
ENGINE = InnoDB  
DEFAULT CHARACTER SET = utf8  
COLLATE = utf8_bin  
COMMENT = 'Column information for phpMyAdmin';
```

```
-----  
-- Table `phpmyadmin`.`pma__designer_settings`
```

```
-----  
CREATE TABLE IF NOT EXISTS `phpmyadmin`.`pma__designer_settings` (  
  `username` VARCHAR(64) NOT NULL,  
  `settings_data` TEXT NOT NULL,  
  PRIMARY KEY (`username`))  
ENGINE = InnoDB  
DEFAULT CHARACTER SET = utf8  
COLLATE = utf8_bin  
COMMENT = 'Settings related to Designer';  
  
-----
```

```
-- Table `phpmyadmin`.`pma__export_templates`  
-----
```

```
CREATE TABLE IF NOT EXISTS `phpmyadmin`.`pma__export_templates` (  
  `id` INT(5) UNSIGNED NOT NULL AUTO_INCREMENT,  
  `username` VARCHAR(64) NOT NULL,  
  `export_type` VARCHAR(10) NOT NULL,  
  `template_name` VARCHAR(64) NOT NULL,  
  `template_data` TEXT NOT NULL,  
  PRIMARY KEY (`id`),  
  UNIQUE INDEX `u_user_type_template` (`username` ASC, `export_type` ASC,  
  `template_name` ASC) VISIBLE)  
ENGINE = InnoDB  
DEFAULT CHARACTER SET = utf8  
COLLATE = utf8_bin  
COMMENT = 'Saved export templates';  
  
-----
```

```
-- Table `phpmyadmin`.`pma__favorite`  
-----
```

```
CREATE TABLE IF NOT EXISTS `phpmyadmin`.`pma__favorite` (  
  `username` VARCHAR(64) NOT NULL,  
  `tables` TEXT NOT NULL,  
  PRIMARY KEY (`username`))  
ENGINE = InnoDB  
DEFAULT CHARACTER SET = utf8  
COLLATE = utf8_bin  
COMMENT = 'Favorite tables';  
  
-----
```

```
-- Table `phpmyadmin`.`pma__history`
```

```
-----  
CREATE TABLE IF NOT EXISTS `phpmyadmin`.`pma__history` (  
  `id` BIGINT(20) UNSIGNED NOT NULL AUTO_INCREMENT,  
  `username` VARCHAR(64) NOT NULL DEFAULT '',  
  `db` VARCHAR(64) NOT NULL DEFAULT '',  
  `table` VARCHAR(64) NOT NULL DEFAULT '',  
  `timevalue` TIMESTAMP NOT NULL DEFAULT CURRENT_TIMESTAMP(),  
  `sqlquery` TEXT NOT NULL,  
  PRIMARY KEY (`id`),  
  INDEX `username` (`username` ASC, `db` ASC, `table` ASC, `timevalue`  
ASC) VISIBLE)  
  ENGINE = InnoDB  
  DEFAULT CHARACTER SET = utf8  
  COLLATE = utf8_bin  
  COMMENT = 'SQL history for phpMyAdmin';
```

```
-- Table `phpmyadmin`.`pma__navigationhiding`
```

```
-----  
CREATE TABLE IF NOT EXISTS `phpmyadmin`.`pma__navigationhiding` (  
  `username` VARCHAR(64) NOT NULL,  
  `item_name` VARCHAR(64) NOT NULL,  
  `item_type` VARCHAR(64) NOT NULL,  
  `db_name` VARCHAR(64) NOT NULL,  
  `table_name` VARCHAR(64) NOT NULL,  
  PRIMARY KEY (`username`, `item_name`, `item_type`, `db_name`,  
`table_name`))  
  ENGINE = InnoDB  
  DEFAULT CHARACTER SET = utf8  
  COLLATE = utf8_bin  
  COMMENT = 'Hidden items of navigation tree';
```

```
-- Table `phpmyadmin`.`pma__pdf_pages`
```

```
-----  
CREATE TABLE IF NOT EXISTS `phpmyadmin`.`pma__pdf_pages` (  
  `db_name` VARCHAR(64) NOT NULL DEFAULT '',  
  `page_nr` INT(10) UNSIGNED NOT NULL AUTO_INCREMENT,  
  `page_descr` VARCHAR(50) CHARACTER SET 'utf8' NOT NULL DEFAULT '',  
  PRIMARY KEY (`page_nr`),
```

```
INDEX `db_name` (`db_name` ASC) VISIBLE)
ENGINE = InnoDB
DEFAULT CHARACTER SET = utf8
COLLATE = utf8_bin
COMMENT = 'PDF relation pages for phpMyAdmin';
```

```
-- Table `phpmyadmin`.`pma__recent`
```

```
CREATE TABLE IF NOT EXISTS `phpmyadmin`.`pma__recent` (
  `username` VARCHAR(64) NOT NULL,
  `tables` TEXT NOT NULL,
  PRIMARY KEY (`username`))
ENGINE = InnoDB
DEFAULT CHARACTER SET = utf8
COLLATE = utf8_bin
COMMENT = 'Recently accessed tables';
```

```
-- Table `phpmyadmin`.`pma__relation`
```

```
CREATE TABLE IF NOT EXISTS `phpmyadmin`.`pma__relation` (
  `master_db` VARCHAR(64) NOT NULL DEFAULT '',
  `master_table` VARCHAR(64) NOT NULL DEFAULT '',
  `master_field` VARCHAR(64) NOT NULL DEFAULT '',
  `foreign_db` VARCHAR(64) NOT NULL DEFAULT '',
  `foreign_table` VARCHAR(64) NOT NULL DEFAULT '',
  `foreign_field` VARCHAR(64) NOT NULL DEFAULT '',
  PRIMARY KEY (`master_db`, `master_table`, `master_field`),
  INDEX `foreign_field` (`foreign_db` ASC, `foreign_table` ASC) VISIBLE)
ENGINE = InnoDB
DEFAULT CHARACTER SET = utf8
COLLATE = utf8_bin
COMMENT = 'Relation table';
```

```
-- Table `phpmyadmin`.`pma__savedsearches`
```

```
CREATE TABLE IF NOT EXISTS `phpmyadmin`.`pma__savedsearches` (
  `id` INT(5) UNSIGNED NOT NULL AUTO_INCREMENT,
```



```

    `username` VARCHAR(64) NOT NULL DEFAULT '',
    `db_name` VARCHAR(64) NOT NULL DEFAULT '',
    `search_name` VARCHAR(64) NOT NULL DEFAULT '',
    `search_data` TEXT NOT NULL,
    PRIMARY KEY (`id`),
    UNIQUE INDEX `u_savedsearches_username_dbname` (`username` ASC,
`db_name` ASC, `search_name` ASC) VISIBLE)
    ENGINE = InnoDB
    DEFAULT CHARACTER SET = utf8
    COLLATE = utf8_bin
    COMMENT = 'Saved searches';

```

```

-----
-- Table `phpmyadmin`.`pma__table_coords`
-----

```

```

CREATE TABLE IF NOT EXISTS `phpmyadmin`.`pma__table_coords` (
    `db_name` VARCHAR(64) NOT NULL DEFAULT '',
    `table_name` VARCHAR(64) NOT NULL DEFAULT '',
    `pdf_page_number` INT(11) NOT NULL DEFAULT 0,
    `x` FLOAT UNSIGNED NOT NULL DEFAULT 0,
    `y` FLOAT UNSIGNED NOT NULL DEFAULT 0,
    PRIMARY KEY (`db_name`, `table_name`, `pdf_page_number`))
    ENGINE = InnoDB
    DEFAULT CHARACTER SET = utf8
    COLLATE = utf8_bin
    COMMENT = 'Table coordinates for phpMyAdmin PDF output';

```

```

-----
-- Table `phpmyadmin`.`pma__table_info`
-----

```

```

CREATE TABLE IF NOT EXISTS `phpmyadmin`.`pma__table_info` (
    `db_name` VARCHAR(64) NOT NULL DEFAULT '',
    `table_name` VARCHAR(64) NOT NULL DEFAULT '',
    `display_field` VARCHAR(64) NOT NULL DEFAULT '',
    PRIMARY KEY (`db_name`, `table_name`))
    ENGINE = InnoDB
    DEFAULT CHARACTER SET = utf8
    COLLATE = utf8_bin
    COMMENT = 'Table information for phpMyAdmin';

```

-- Table `phpmyadmin`.`pma__table_uiprefs`

```
CREATE TABLE IF NOT EXISTS `phpmyadmin`.`pma__table_uiprefs` (  
  `username` VARCHAR(64) NOT NULL,  
  `db_name` VARCHAR(64) NOT NULL,  
  `table_name` VARCHAR(64) NOT NULL,  
  `prefs` TEXT NOT NULL,  
  `last_update` TIMESTAMP NOT NULL DEFAULT CURRENT_TIMESTAMP() ON UPDATE  
CURRENT_TIMESTAMP(),  
  PRIMARY KEY (`username`, `db_name`, `table_name`))  
ENGINE = InnoDB  
DEFAULT CHARACTER SET = utf8  
COLLATE = utf8_bin  
COMMENT = 'Tables\' UI preferences';
```

-- Table `phpmyadmin`.`pma__tracking`

```
CREATE TABLE IF NOT EXISTS `phpmyadmin`.`pma__tracking` (  
  `db_name` VARCHAR(64) NOT NULL,  
  `table_name` VARCHAR(64) NOT NULL,  
  `version` INT(10) UNSIGNED NOT NULL,  
  `date_created` DATETIME NOT NULL,  
  `date_updated` DATETIME NOT NULL,  
  `schema_snapshot` TEXT NOT NULL,  
  `schema_sql` TEXT NULL DEFAULT NULL,  
  `data_sql` LONGTEXT NULL DEFAULT NULL,  
  `tracking` SET('UPDATE', 'REPLACE', 'INSERT', 'DELETE', 'TRUNCATE',  
'CREATE DATABASE', 'ALTER DATABASE', 'DROP DATABASE', 'CREATE TABLE',  
'ALTER TABLE', 'RENAME TABLE', 'DROP TABLE', 'CREATE INDEX', 'DROP INDEX',  
'CREATE VIEW', 'ALTER VIEW', 'DROP VIEW') NULL DEFAULT NULL,  
  `tracking_active` INT(1) UNSIGNED NOT NULL DEFAULT 1,  
  PRIMARY KEY (`db_name`, `table_name`, `version`))  
ENGINE = InnoDB  
DEFAULT CHARACTER SET = utf8  
COLLATE = utf8_bin  
COMMENT = 'Database changes tracking for phpMyAdmin';
```

-- Table `phpmyadmin`.`pma__userconfig`

```
-----  
CREATE TABLE IF NOT EXISTS `phpmyadmin`.`pma__userconfig` (  
  `username` VARCHAR(64) NOT NULL,  
  `timevalue` TIMESTAMP NOT NULL DEFAULT CURRENT_TIMESTAMP() ON UPDATE  
CURRENT_TIMESTAMP(),  
  `config_data` TEXT NOT NULL,  
  PRIMARY KEY (`username`))  
ENGINE = InnoDB  
DEFAULT CHARACTER SET = utf8  
COLLATE = utf8_bin  
COMMENT = 'User preferences storage for phpMyAdmin';  
  
-----
```

```
-- Table `phpmyadmin`.`pma__usergroups`  
-----
```

```
CREATE TABLE IF NOT EXISTS `phpmyadmin`.`pma__usergroups` (  
  `usergroup` VARCHAR(64) NOT NULL,  
  `tab` VARCHAR(64) NOT NULL,  
  `allowed` ENUM('Y', 'N') NOT NULL DEFAULT 'N',  
  PRIMARY KEY (`usergroup`, `tab`, `allowed`))  
ENGINE = InnoDB  
DEFAULT CHARACTER SET = utf8  
COLLATE = utf8_bin  
COMMENT = 'User groups with configured menu items';  
  
-----
```

```
-- Table `phpmyadmin`.`pma__users`  
-----
```

```
CREATE TABLE IF NOT EXISTS `phpmyadmin`.`pma__users` (  
  `username` VARCHAR(64) NOT NULL,  
  `usergroup` VARCHAR(64) NOT NULL,  
  PRIMARY KEY (`username`, `usergroup`))  
ENGINE = InnoDB  
DEFAULT CHARACTER SET = utf8  
COLLATE = utf8_bin  
COMMENT = 'Users and their assignments to user groups';  
  
-----
```

```
USE `mydb` ;  
  
-----
```

```
-- Placeholder table for view `mydb`.`view1`  
-----
```

```
-----  
CREATE TABLE IF NOT EXISTS `mydb`.`view1` (`id` INT);
```

```
-----  
-- View `mydb`.`view1`  
-----
```

```
DROP TABLE IF EXISTS `mydb`.`view1`;  
USE `mydb`;
```

```
CREATE USER 'root' IDENTIFIED BY 'root';
```

```
SET SQL_MODE=@OLD_SQL_MODE;  
SET FOREIGN_KEY_CHECKS=@OLD_FOREIGN_KEY_CHECKS;  
SET UNIQUE_CHECKS=@OLD_UNIQUE_CHECKS;
```

Maintenance Requirements.

To generate Reliable data the operation managers are required to use the system accordingly and maintain it so that generated reports are as valid as possible.

Supportability

Constant Patches and user-specific demands must be fulfilled such that the client can rely on the system.

Audit Requirement

Since Each factory is unique on its own it is important to note that the product designer must be present within the system. Proper auditing will only better use case scenarios for the users.