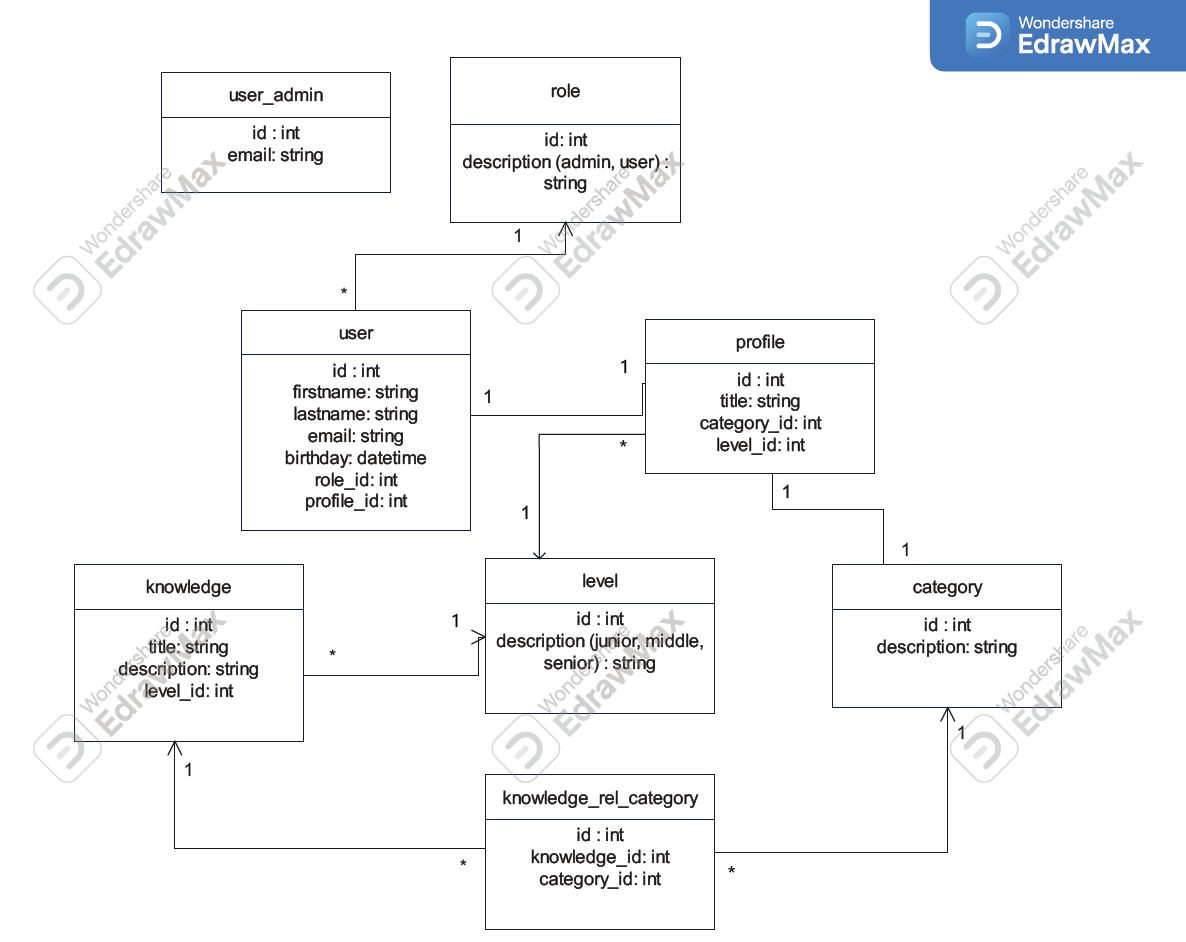
**Diagramma UML**

Ogni utente può avere come **role** quello di admin o user (semplice). Nella fase di creazione, in cui si presuppone che un utente possa avere 1 unico **profile** (Web Developer, Data Analyst ed ecc), si va a definire anche la **category** a cui appartiene che è di fatto si forma andando a definire l’insieme delle **knowledge** specifiche del profilo. A queste si assegna una specifica **level** (può scegliere tra junior, middle e senior). Tale level è assegnata anche al profilo. Per le knowledge l’utente può scegliere tra una voce già presente a DB, perché inserita da altri utenti, o digitarne una nuova.

Per creare il diagramma UML, mostrato di seguito, si è fatto uso di ***EdrawMax***.



**Creazione Database**

Si riporta il contenuto del file dump per creare il database:

*-- --------------------------------------------------------*

*-- Host: 127.0.0.1*

*-- Versione server: 8.0.33 - MySQL Community Server - GPL*

*-- S.O. server: Win64*

*-- HeidiSQL Versione: 12.8.0.6908*

*-- --------------------------------------------------------*

*/\*!40101 SET @OLD\_CHARACTER\_SET\_CLIENT=@@CHARACTER\_SET\_CLIENT \*/;*

*/\*!40101 SET NAMES utf8 \*/;*

*/\*!50503 SET NAMES utf8mb4 \*/;*

*/\*!40103 SET @OLD\_TIME\_ZONE=@@TIME\_ZONE \*/;*

*/\*!40103 SET TIME\_ZONE='+00:00' \*/;*

*/\*!40014 SET @OLD\_FOREIGN\_KEY\_CHECKS=@@FOREIGN\_KEY\_CHECKS, FOREIGN\_KEY\_CHECKS=0 \*/;*

*/\*!40101 SET @OLD\_SQL\_MODE=@@SQL\_MODE, SQL\_MODE='NO\_AUTO\_VALUE\_ON\_ZERO' \*/;*

*/\*!40111 SET @OLD\_SQL\_NOTES=@@SQL\_NOTES, SQL\_NOTES=0 \*/;*

*-- Dump della struttura del database project\_challenge*

***CREATE******DATABASE******IF******NOT******EXISTS*** *`project\_challenge` /\*!40100 DEFAULT CHARACTER SET utf8mb4 COLLATE utf8mb4\_0900\_ai\_ci \*/ /\*!80016 DEFAULT ENCRYPTION='N' \*/;*

***USE*** *`project\_challenge`;*

*-- Dump della struttura di tabella project\_challenge.category*

***CREATE******TABLE******IF******NOT******EXISTS*** *`category` (*

*`id`* ***int******NOT******NULL******AUTO\_INCREMENT****,*

*`description`* ***varchar****(255)* ***NOT******NULL******DEFAULT*** *'',*

*`created\_at`* ***timestamp******NOT******NULL******DEFAULT*** *(****now****()),*

*`updated\_at`* ***timestamp******NOT******NULL******DEFAULT*** *(****now****()),*

***PRIMARY******KEY*** *(`id`)*

*)* ***ENGINE****=****InnoDB******AUTO\_INCREMENT****=4* ***DEFAULT******CHARSET****=****utf8mb4******COLLATE****=utf8mb4\_0900\_ai\_ci;*

*-- Dump dei dati della tabella project\_challenge.category: ~1 rows (circa)*

***INSERT******IGNORE******INTO*** *`category` (`id`, `description`, `created\_at`, `updated\_at`)* ***VALUES***

*(3, 'Web Designer', '2025-07-26 15:50:28', '2025-07-26 15:50:28');*

*-- Dump della struttura di tabella project\_challenge.knowledge*

***CREATE******TABLE******IF******NOT******EXISTS*** *`knowledge` (*

*`id`* ***int******NOT******NULL******AUTO\_INCREMENT****,*

*`title`* ***varchar****(255)* ***NOT******NULL******DEFAULT*** *'',*

*`description`* ***varchar****(255)* ***DEFAULT*** *'',*

*`level\_id`* ***int******NOT******NULL******DEFAULT*** *'0',*

*`created\_at`* ***timestamp******NOT******NULL******DEFAULT*** *(****now****()),*

*`updated\_at`* ***timestamp******NOT******NULL******DEFAULT*** *(****now****()),*

***PRIMARY******KEY*** *(`id`),*

***KEY*** *`FK\_knowledge\_level` (`level\_id`),*

***CONSTRAINT*** *`FK\_knowledge\_level`* ***FOREIGN******KEY*** *(`level\_id`)* ***REFERENCES*** *`level` (`id`)*

*)* ***ENGINE****=****InnoDB******AUTO\_INCREMENT****=7* ***DEFAULT******CHARSET****=****utf8mb4******COLLATE****=utf8mb4\_0900\_ai\_ci;*

*-- Dump dei dati della tabella project\_challenge.knowledge: ~3 rows (circa)*

***INSERT******IGNORE******INTO*** *`knowledge` (`id`, `title`, `description`, `level\_id`, `created\_at`, `updated\_at`)* ***VALUES***

*(4, '', 'Figma', 2, '2025-07-26 15:50:28', '2025-07-26 15:50:28'),*

*(5, '', 'HTML', 1, '2025-07-26 15:50:28', '2025-07-26 15:50:28'),*

*(6, '', 'CSS', 1, '2025-07-26 15:50:28', '2025-07-26 15:50:28');*

*-- Dump della struttura di tabella project\_challenge.knowledge\_rel\_category*

***CREATE******TABLE******IF******NOT******EXISTS*** *`knowledge\_rel\_category` (*

*`id`* ***int******NOT******NULL******AUTO\_INCREMENT****,*

*`knowledge\_id`* ***int******NOT******NULL******DEFAULT*** *'0',*

*`category\_id`* ***int******NOT******NULL******DEFAULT*** *'0',*

*`created\_at`* ***timestamp******NOT******NULL******DEFAULT*** *(****now****()),*

*`updated\_at`* ***timestamp******NOT******NULL******DEFAULT*** *(****now****()),*

***PRIMARY******KEY*** *(`id`),*

***KEY*** *`FK\_knowledge\_rel\_category\_knowledge\_id` (`knowledge\_id`),*

***KEY*** *`FK\_knowledge\_rel\_category\_category\_id` (`category\_id`),*

***CONSTRAINT*** *`FK\_knowledge\_rel\_category\_category\_id`* ***FOREIGN******KEY*** *(`category\_id`)* ***REFERENCES*** *`category` (`id`),*

***CONSTRAINT*** *`FK\_knowledge\_rel\_category\_knowledge\_id`* ***FOREIGN******KEY*** *(`knowledge\_id`)* ***REFERENCES*** *`knowledge` (`id`)*

*)* ***ENGINE****=****InnoDB******AUTO\_INCREMENT****=7* ***DEFAULT******CHARSET****=****utf8mb4******COLLATE****=utf8mb4\_0900\_ai\_ci;*

*-- Dump dei dati della tabella project\_challenge.knowledge\_rel\_category: ~3 rows (circa)*

***INSERT******IGNORE******INTO*** *`knowledge\_rel\_category` (`id`, `knowledge\_id`, `category\_id`, `created\_at`, `updated\_at`)* ***VALUES***

*(4, 4, 3, '2025-07-26 15:50:28', '2025-07-26 15:50:28'),*

*(5, 5, 3, '2025-07-26 15:50:28', '2025-07-26 15:50:28'),*

*(6, 6, 3, '2025-07-26 15:50:28', '2025-07-26 15:50:28');*

*-- Dump della struttura di tabella project\_challenge.level*

***CREATE******TABLE******IF******NOT******EXISTS*** *`level` (*

*`id`* ***int******NOT******NULL******AUTO\_INCREMENT****,*

*`description`* ***varchar****(50)* ***NOT******NULL******DEFAULT*** *'0',*

*`created\_at`* ***timestamp******NOT******NULL******DEFAULT*** *(****now****()),*

*`updated\_at`* ***timestamp******NOT******NULL******DEFAULT*** *(****now****()),*

***PRIMARY******KEY*** *(`id`)*

*)* ***ENGINE****=****InnoDB******AUTO\_INCREMENT****=4* ***DEFAULT******CHARSET****=****utf8mb4******COLLATE****=utf8mb4\_0900\_ai\_ci;*

*-- Dump dei dati della tabella project\_challenge.level: ~3 rows (circa)*

***INSERT******IGNORE******INTO*** *`level` (`id`, `description`, `created\_at`, `updated\_at`)* ***VALUES***

*(1, 'junior', '2025-07-26 17:41:47', '2025-07-26 17:41:47'),*

*(2, 'middle', '2025-07-26 17:41:47', '2025-07-26 17:41:47'),*

*(3, 'senior', '2025-07-26 17:41:47', '2025-07-26 17:41:47');*

*-- Dump della struttura di tabella project\_challenge.profile*

***CREATE******TABLE******IF******NOT******EXISTS*** *`profile` (*

*`id`* ***int******NOT******NULL******AUTO\_INCREMENT****,*

*`title`* ***varchar****(255)* ***NOT******NULL******DEFAULT*** *'',*

*`category\_id`* ***int******NOT******NULL******DEFAULT*** *(0),*

*`level\_id`* ***int******NOT******NULL******DEFAULT*** *(0),*

*`created\_at`* ***timestamp******NOT******NULL******DEFAULT*** *(****now****()),*

*`updated\_at`* ***timestamp******NOT******NULL******DEFAULT*** *(****now****()),*

***PRIMARY******KEY*** *(`id`),*

***KEY*** *`FK\_profile\_category` (`category\_id`),*

***KEY*** *`FK\_profile\_level` (`level\_id`),*

***CONSTRAINT*** *`FK\_profile\_category`* ***FOREIGN******KEY*** *(`category\_id`)* ***REFERENCES*** *`category` (`id`),*

***CONSTRAINT*** *`FK\_profile\_level`* ***FOREIGN******KEY*** *(`level\_id`)* ***REFERENCES*** *`level` (`id`)*

*)* ***ENGINE****=****InnoDB******AUTO\_INCREMENT****=3* ***DEFAULT******CHARSET****=****utf8mb4******COLLATE****=utf8mb4\_0900\_ai\_ci;*

*-- Dump dei dati della tabella project\_challenge.profile: ~1 rows (circa)*

***INSERT******IGNORE******INTO*** *`profile` (`id`, `title`, `category\_id`, `level\_id`, `created\_at`, `updated\_at`)* ***VALUES***

*(2, 'Web Designer', 3, 1, '2025-07-26 15:50:28', '2025-07-26 15:50:28');*

*-- Dump della struttura di tabella project\_challenge.role*

***CREATE******TABLE******IF******NOT******EXISTS*** *`role` (*

*`id`* ***int******NOT******NULL******AUTO\_INCREMENT****,*

*`description`* ***varchar****(255)* ***CHARACTER******SET******utf8mb4******COLLATE*** *utf8mb4\_0900\_ai\_ci* ***NOT******NULL****,*

*`created\_at`* ***timestamp******NOT******NULL******DEFAULT*** *(****now****()),*

*`updated\_at`* ***timestamp******NOT******NULL******DEFAULT*** *(****now****()),*

***PRIMARY******KEY*** *(`id`)*

*)* ***ENGINE****=****InnoDB******AUTO\_INCREMENT****=3* ***DEFAULT******CHARSET****=****utf8mb4******COLLATE****=utf8mb4\_0900\_ai\_ci;*

*-- Dump dei dati della tabella project\_challenge.role: ~2 rows (circa)*

***INSERT******IGNORE******INTO*** *`role` (`id`, `description`, `created\_at`, `updated\_at`)* ***VALUES***

*(1, 'admin', '2025-07-26 17:42:55', '2025-07-26 17:42:55'),*

*(2, 'user', '2025-07-26 17:42:55', '2025-07-26 17:42:55');*

*-- Dump della struttura di tabella project\_challenge.user*

***CREATE******TABLE******IF******NOT******EXISTS*** *`user` (*

*`id`* ***int******NOT******NULL******AUTO\_INCREMENT****,*

*`firstname`* ***varchar****(255)* ***NOT******NULL******DEFAULT*** *'',*

*`lastname`* ***varchar****(255)* ***NOT******NULL******DEFAULT*** *'',*

*`email`* ***varchar****(255)* ***NOT******NULL******DEFAULT*** *'',*

*`birthday`* ***datetime******DEFAULT******NULL****,*

*`role\_id`* ***int******NOT******NULL******DEFAULT*** *(0),*

*`profile\_id`* ***int******NOT******NULL******DEFAULT*** *(0),*

*`created\_at`* ***timestamp******NOT******NULL******DEFAULT*** *(****now****()),*

*`updated\_at`* ***timestamp******NOT******NULL******DEFAULT*** *(****now****()),*

***PRIMARY******KEY*** *(`id`),*

***KEY*** *`FK\_user\_profile` (`profile\_id`),*

***KEY*** *`FK\_user\_role` (`role\_id`),*

***CONSTRAINT*** *`FK\_user\_profile`* ***FOREIGN******KEY*** *(`profile\_id`)* ***REFERENCES*** *`profile` (`id`),*

***CONSTRAINT*** *`FK\_user\_role`* ***FOREIGN******KEY*** *(`role\_id`)* ***REFERENCES*** *`role` (`id`)*

*)* ***ENGINE****=****InnoDB******AUTO\_INCREMENT****=2* ***DEFAULT******CHARSET****=****utf8mb4******COLLATE****=utf8mb4\_0900\_ai\_ci;*

*-- Dump dei dati della tabella project\_challenge.user: ~1 rows (circa)*

***INSERT******IGNORE******INTO*** *`user` (`id`, `firstname`, `lastname`, `email`, `birthday`, `role\_id`, `profile\_id`, `created\_at`, `updated\_at`)* ***VALUES***

*(1, 'Mario', 'Rossi', 'mario.rossi@gmail.com', '2025-07-26 17:50:28', 2, 2, '2025-07-26 15:50:28', '2025-07-26 15:50:28');*

*-- Dump della struttura di tabella project\_challenge.user\_admin*

***CREATE******TABLE******IF******NOT******EXISTS*** *`user\_admin` (*

*`id`* ***int******NOT******NULL******AUTO\_INCREMENT****,*

*`email`* ***varchar****(255)* ***NOT******NULL******DEFAULT*** *'',*

*`created\_at`* ***timestamp******NOT******NULL******DEFAULT*** *(****now****()),*

*`updated\_at`* ***timestamp******NOT******NULL******DEFAULT*** *(****now****()),*

***PRIMARY******KEY*** *(`id`)*

*)* ***ENGINE****=****InnoDB******DEFAULT******CHARSET****=****utf8mb4******COLLATE****=utf8mb4\_0900\_ai\_ci;*

*-- Dump dei dati della tabella project\_challenge.user\_admin: ~0 rows (circa)*

*/\*!40103 SET TIME\_ZONE=IFNULL(@OLD\_TIME\_ZONE, 'system') \*/;*

*/\*!40101 SET SQL\_MODE=IFNULL(@OLD\_SQL\_MODE, '') \*/;*

*/\*!40014 SET FOREIGN\_KEY\_CHECKS=IFNULL(@OLD\_FOREIGN\_KEY\_CHECKS, 1) \*/;*

*/\*!40101 SET CHARACTER\_SET\_CLIENT=@OLD\_CHARACTER\_SET\_CLIENT \*/;*

*/\*!40111 SET SQL\_NOTES=IFNULL(@OLD\_SQL\_NOTES, 1) \*/;*