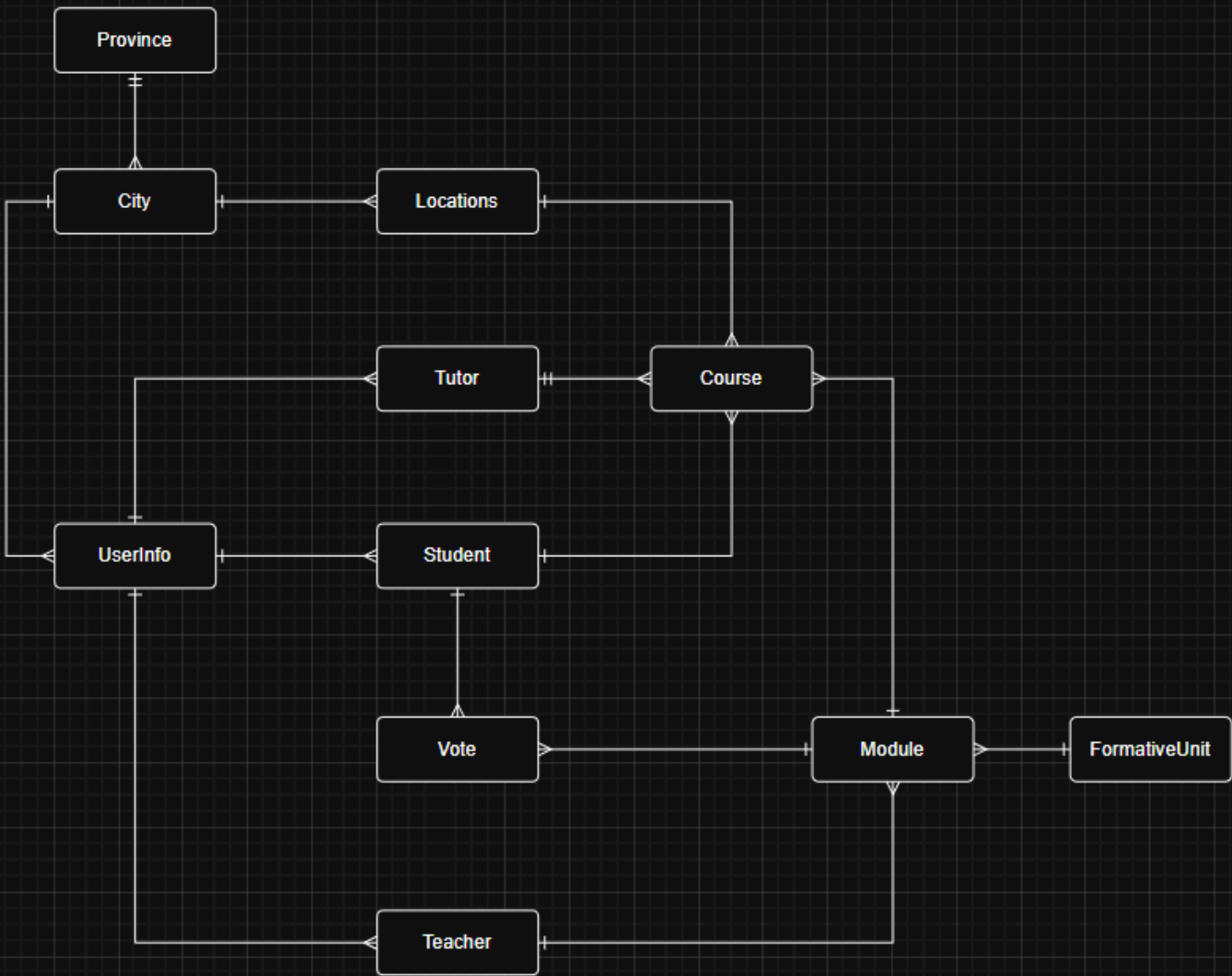


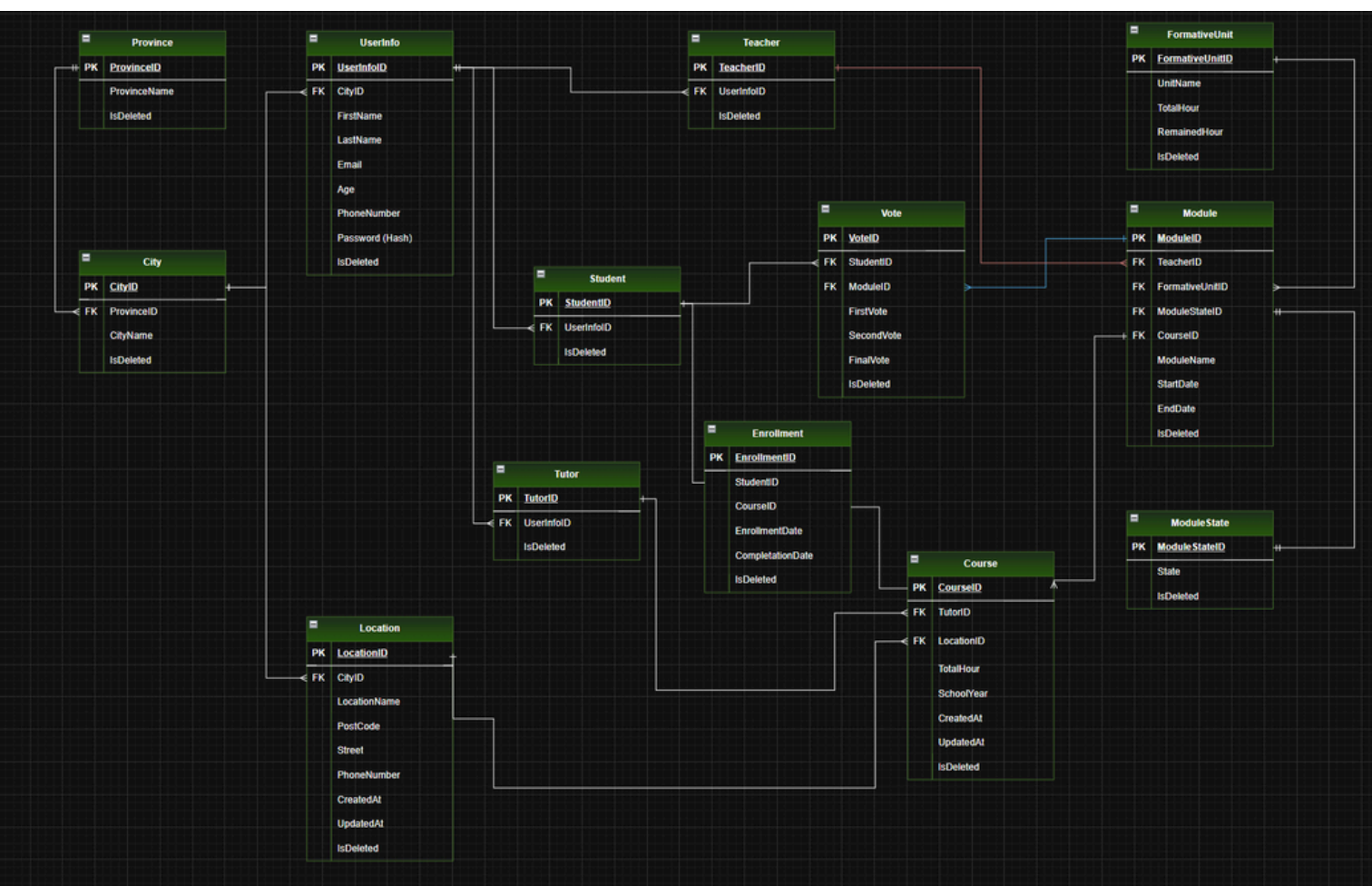
# STEVEJOBS DATABASE

## DAVIDE D'AMICO



# CONCEPTUAL MODEL



# DIAGRAMMA ER



# TABELLA PROVINCE

				ProvinceID	ProvinceName	IsDeleted
<input type="checkbox"/>	 Modifica	 Copia	 Elimina	1	Palermo	0
<input type="checkbox"/>	 Modifica	 Copia	 Elimina	2	Catania	0

```
CREATE TABLE Province (  
    ProvinceID INT NOT NULL AUTO_INCREMENT,  
    ProvinceName VARCHAR(100) NOT NULL,  
    IsDeleted BOOLEAN NOT NULL DEFAULT FALSE,  
    PRIMARY KEY (ProvinceID)  
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_unicode_ci;
```

# TABELLA CITY

<div><div><div></div><div></div><div></div></div></div>					CityID	ProvinceID	CityName	IsDeleted		
<input type="checkbox"/>		Modifica		Copia		Elimina	1	1	Palermo	0
<input type="checkbox"/>		Modifica		Copia		Elimina	2	2	Catania	0
<input type="checkbox"/>		Modifica		Copia		Elimina	3	2	Caltagirone	0

```
CREATE TABLE City (  
    CityID INT NOT NULL AUTO_INCREMENT,  
    ProvinceID INT NOT NULL,  
    CityName VARCHAR(100) NOT NULL,  
    IsDeleted BOOLEAN NOT NULL DEFAULT FALSE,  
    PRIMARY KEY (CityID),  
    FOREIGN KEY (ProvinceID) REFERENCES Province(ProvinceID) ON DELETE RESTRICT ON UPDATE CASCADE  
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_unicode_ci;
```

# TABELLA MODULESTATE

				ModuleStateID	State	IsDeleted
<input type="checkbox"/>	Modifica	Copia	Elimina	1	In corso	0
<input type="checkbox"/>	Modifica	Copia	Elimina	2	Completato	0





































```
CREATE TABLE ModuleState (  
  ModuleStateID INT NOT NULL AUTO_INCREMENT,  
  State VARCHAR(50) NOT NULL,  
  IsDeleted BOOLEAN NOT NULL DEFAULT FALSE,  
  PRIMARY KEY (ModuleStateID)  
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_unicode_ci;
```

# TABELLA FORMATIVEUNIT

← T →						FormativeUnitID	UnitName	TotalHour	RemainderHour	IsDeleted	
<input type="checkbox"/>		Modifica		Copia		Elimina	1	Matematica	1800	0	0
<input type="checkbox"/>		Modifica		Copia		Elimina	2	Sicurezza sul lavoro	1800	0	0
<input type="checkbox"/>		Modifica		Copia		Elimina	3	React	1800	0	0
<input type="checkbox"/>		Modifica		Copia		Elimina	4	Angular	1800	1216	0
<input type="checkbox"/>		Modifica		Copia		Elimina	5	Cloud computing	1800	165	0
<input type="checkbox"/>		Modifica		Copia		Elimina	6	Data Analysis	1800	0	0
<input type="checkbox"/>		Modifica		Copia		Elimina	7	Data Management	1800	154	0
<input type="checkbox"/>		Modifica		Copia		Elimina	8	Sistemi di versioning	1800	0	0
<input type="checkbox"/>		Modifica		Copia		Elimina	9	PHP	1800	959	0
<input type="checkbox"/>		Modifica		Copia		Elimina	10	Inglese	1800	669	0
<input type="checkbox"/>		Modifica		Copia		Elimina	11	Legislazione di settore	1800	426	0
<input type="checkbox"/>		Modifica		Copia		Elimina	12	Web Architecture & Backend	1800	669	0

```
CREATE TABLE FormativeUnit (  
  FormativeUnitID INT NOT NULL AUTO_INCREMENT,  
  UnitName VARCHAR(150) NOT NULL,  
  TotalHour INT NOT NULL,  
  RemainderHour INT NOT NULL,  
  IsDeleted BOOLEAN NOT NULL DEFAULT FALSE,  
  PRIMARY KEY (FormativeUnitID)  
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_unicode_ci;
```










# TABELLA USERINFO

		▼		UserInfoID	CityID	FirstName	LastName	BirthDate	Email	PhoneNumber	Password	IsDeleted
<input type="checkbox"/>	 Modifica	 Copia	 Elimina	1	1	Eugenia	Caracciolo	2001-06-04	leonegioele@example.org	+39 345181960	\$2b\$04\$Kjfw3EfsSsqDBapGA4lgJOLWSJ0viZk0i9BTxng96sw...	0
<input type="checkbox"/>	 Modifica	 Copia	 Elimina	2	1	Giustino	Battaglia	1996-06-20	hvalguarnera@example.com	+39 093249593	\$2b\$04\$Kcl_JCWtykd/nUDKpT8ZulWG0c9FzoSQI/KUKTYFu...	0
<input type="checkbox"/>	 Modifica	 Copia	 Elimina	3	1	Gloeie	Dalla	1993-09-04	rparisi@example.net	NULL	\$2b\$04\$0Rmd1Av1QrUYMPnPqPjMa.4CoevLFYbnYxh1V4q1o6Q...	0
<input type="checkbox"/>	 Modifica	 Copia	 Elimina	4	2	Elladio	Gradenigo	2005-09-10	ludovica96@example.net	NULL	\$2b\$04\$8ejEtbP.J/QWRGoqJjcOeeQnY7ltp1MmZOgZMdBznZl...	0
<input type="checkbox"/>	 Modifica	 Copia	 Elimina	5	3	Giuliana	Valier	1996-10-07	marissa51@example.com	0375704828	\$2b\$04\$NkV60hYW6xyjZxz1NEGlibeTKqstzU8Wh5AGSJFeZlv3...	0
<input type="checkbox"/>	 Modifica	 Copia	 Elimina	6	1	Patrizia	Bompiani	2000-05-03	dionigisiffredi@example.net	NULL	\$2b\$04\$leNn.0VlptXM7Gxvc1FLuL1GnpcnRDa35ABHINK3M...	0
<input type="checkbox"/>	 Modifica	 Copia	 Elimina	7	1	Gianmarco	Galuppi	1995-05-15	bondumierisabella@example.net	+39 0445105187	\$2b\$04\$ohvU1CRsc970dFa9sD0iK.Rimu3Y8OaoqKgHYq79E13...	0
<input type="checkbox"/>	 Modifica	 Copia	 Elimina	8	2	Lilla	Morlacchi	2002-06-12	grassotredo@example.org	0364624738	\$2b\$04\$it798iZcp/gAOaJXhfB.9LeNRFE59i0Jn.1akYRqzM8d...	0
<input type="checkbox"/>	 Modifica	 Copia	 Elimina	9	2	Lisa	Vivaldi	2005-10-21	mcostanzi@example.com	+39 377909805	\$2b\$04\$IV3qFSnZdZgFUE8vHD4Q6OluicXxYz5ljCSTob/xQ7...	0
<input type="checkbox"/>	 Modifica	 Copia	 Elimina	10	3	Luchino	Gulotta	2000-03-15	gemmamazzocchi@example.org	0732247519	\$2b\$04\$kk1g1/LwE7FmH87pG.oeWOHCElmy1xkEF8jK3Cb4is...	0
<input type="checkbox"/>	 Modifica	 Copia	 Elimina	11	3	Francesca	Cammarata	1990-04-22	giustinocarpaccio@example.org	+39 05324935384	\$2b\$04\$gc.5DwX1N.OsKBv50VNFKeVPOlrQwL38.kQMZFEd69s...	0
<input type="checkbox"/>	 Modifica	 Copia	 Elimina	12	1	Berenice	Viola	2000-01-26	puccioceravolo@example.org	05870533189	\$2b\$04\$ii4UNTM7C7i0vLVABMU6Z.telvxmatrnodzBod6awu1CA...	0

```
CREATE TABLE UserInfo (  
    UserInfoID INT NOT NULL AUTO_INCREMENT,  
    CityID INT NOT NULL,  
    FirstName VARCHAR(100) NOT NULL,  
    LastName VARCHAR(100) NOT NULL,  
    BirthDate DATE NOT NULL,  
    Email VARCHAR(255) NOT NULL,  
    PhoneNumber VARCHAR(20),  
    Password VARCHAR(255) NOT NULL,  
    IsDeleted BOOLEAN NOT NULL DEFAULT FALSE,  
    PRIMARY KEY (UserInfoID),  
    UNIQUE KEY unique_email (Email),  
    FOREIGN KEY (CityID) REFERENCES City(CityID) ON DELETE RESTRICT ON UPDATE CASCADE  
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_unicode_ci;
```

































# TABELLA LOCATION

			LocationID	CityID	LocationName	PostCode	Street	PhoneNumber	CreatedAt	UpdatedAt	IsDeleted	
<input type="checkbox"/>	 Modifica	 Copia	 Elimina	1	1	Palermo	90100	Piazza Gastone, 63	05789680724	2019-11-22	2022-06-22	0
<input type="checkbox"/>	 Modifica	 Copia	 Elimina	2	2	Catania	95100	Via Castioni, 558	+39 0156445472	2019-11-16	2020-01-16	0
<input type="checkbox"/>	 Modifica	 Copia	 Elimina	3	3	Caltagirone	95041	Via Fulvio, 927	0774633422	2019-01-18	2022-01-18	0































```
CREATE TABLE Location (  
    LocationID INT NOT NULL AUTO_INCREMENT,  
    CityID INT NOT NULL,  
    LocationName VARCHAR(150) NOT NULL,  
    PostCode VARCHAR(10) NOT NULL,  
    Street VARCHAR(200) NOT NULL,  
    PhoneNumber VARCHAR(20),  
    CreatedAt DATE NOT NULL,  
    UpdatedAt DATE NOT NULL,  
    IsDeleted BOOLEAN NOT NULL DEFAULT FALSE,  
    PRIMARY KEY (LocationID),  
    FOREIGN KEY (CityID) REFERENCES City(CityID) ON DELETE RESTRICT ON UPDATE CASCADE  
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_unicode_ci;
```

# TABELLA STUDENT

<div>↔T↔</div>				StudentID	UserInfold	IsDeleted			
<input type="checkbox"/>		Modifica		Copia		Elimina	1	1	0
<input type="checkbox"/>		Modifica		Copia		Elimina	2	2	0
<input type="checkbox"/>		Modifica		Copia		Elimina	3	3	0
<input type="checkbox"/>		Modifica		Copia		Elimina	4	4	0
<input type="checkbox"/>		Modifica		Copia		Elimina	5	5	0
<input type="checkbox"/>		Modifica		Copia		Elimina	6	6	0
<input type="checkbox"/>		Modifica		Copia		Elimina	7	7	0
<input type="checkbox"/>		Modifica		Copia		Elimina	8	8	0
<input type="checkbox"/>		Modifica		Copia		Elimina	9	9	0
<input type="checkbox"/>		Modifica		Copia		Elimina	10	10	0































```
CREATE TABLE Student (  
  StudentID INT NOT NULL AUTO_INCREMENT,  
  UserInfoID INT NOT NULL,  
  IsDeleted BOOLEAN NOT NULL DEFAULT FALSE,  
  PRIMARY KEY (StudentID),  
  UNIQUE KEY unique_userinfo_student (UserInfoID),  
  FOREIGN KEY (UserInfoID) REFERENCES UserInfo(UserInfoID) ON DELETE RESTRICT ON UPDATE CASCADE  
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_unicode_ci;
```

# TABELLA TUTOR

<div><div><div>←T→</div><div></div></div></div>					TutorID	UserInfoid	IsDeleted		
<input type="checkbox"/>		Modifica		Copia		Elimina	1	501	0
<input type="checkbox"/>		Modifica		Copia		Elimina	2	502	0
<input type="checkbox"/>		Modifica		Copia		Elimina	3	503	0
<input type="checkbox"/>		Modifica		Copia		Elimina	4	504	0
<input type="checkbox"/>		Modifica		Copia		Elimina	5	505	0
<input type="checkbox"/>		Modifica		Copia		Elimina	6	506	0
<input type="checkbox"/>		Modifica		Copia		Elimina	7	507	0
<input type="checkbox"/>		Modifica		Copia		Elimina	8	508	0
<input type="checkbox"/>		Modifica		Copia		Elimina	9	509	0
<input type="checkbox"/>		Modifica		Copia		Elimina	10	510	0

























```
CREATE TABLE Tutor (
  TutorID INT NOT NULL AUTO_INCREMENT,
  UserInfoID INT NOT NULL,
  IsDeleted BOOLEAN NOT NULL DEFAULT FALSE,
  PRIMARY KEY (TutorID),
  UNIQUE KEY unique_userinfo_tutor (UserInfoID),
  FOREIGN KEY (UserInfoID) REFERENCES UserInfo(UserInfoID) ON DELETE RESTRICT ON UPDATE CASCADE
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_unicode_ci;
```

# TABELLA TEACHER

<div>← T →</div>				TeacherID	UserInfold	IsDeleted	
<input type="checkbox"/>		Modifica	 Copia	 Elimina	1	516	0
<input type="checkbox"/>		Modifica	 Copia	 Elimina	2	517	0
<input type="checkbox"/>		Modifica	 Copia	 Elimina	3	518	0
<input type="checkbox"/>		Modifica	 Copia	 Elimina	4	519	0
<input type="checkbox"/>		Modifica	 Copia	 Elimina	5	520	0
<input type="checkbox"/>		Modifica	 Copia	 Elimina	6	521	0
<input type="checkbox"/>		Modifica	 Copia	 Elimina	7	522	0
<input type="checkbox"/>		Modifica	 Copia	 Elimina	8	523	0
<input type="checkbox"/>		Modifica	 Copia	 Elimina	9	524	0
<input type="checkbox"/>		Modifica	 Copia	 Elimina	10	525	0


































```
CREATE TABLE Teacher (  
  TeacherID INT NOT NULL AUTO_INCREMENT,  
  UserInfoID INT NOT NULL,  
  IsDeleted BOOLEAN NOT NULL DEFAULT FALSE,  
  PRIMARY KEY (TeacherID),  
  UNIQUE KEY unique_userinfo_teacher (UserInfoID),  
  FOREIGN KEY (UserInfoID) REFERENCES UserInfo(UserInfoID) ON DELETE RESTRICT ON UPDATE CASCADE  
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_unicode_ci;
```

# TABELLA COURSE

← T →						CourseID	TutorID	LocationID	TotalHour	SchoolYear	CreatedAt	UpdatedAt	IsDeleted	
<input type="checkbox"/>		Modifica		Copia		Elimina	1	5	3	1800	2019/2020	2019-09-01	2020-05-24	0
<input type="checkbox"/>		Modifica		Copia		Elimina	2	12	3	1800	2021/2022	2021-09-01	2022-05-27	0
<input type="checkbox"/>		Modifica		Copia		Elimina	3	15	1	1800	2022/2023	2022-09-13	2023-02-04	0
<input type="checkbox"/>		Modifica		Copia		Elimina	4	10	3	1800	2023/2024	2023-09-03	2024-02-07	0
<input type="checkbox"/>		Modifica		Copia		Elimina	5	13	2	1800	2021/2022	2021-09-14	2022-03-09	0
<input type="checkbox"/>		Modifica		Copia		Elimina	6	10	1	1800	2019/2020	2019-09-06	2020-04-15	0
<input type="checkbox"/>		Modifica		Copia		Elimina	7	14	1	1800	2024/2025	2024-09-04	2025-03-22	0
<input type="checkbox"/>		Modifica		Copia		Elimina	8	1	1	1800	2024/2025	2024-09-14	2025-06-25	0
<input type="checkbox"/>		Modifica		Copia		Elimina	9	8	1	1800	2022/2023	2022-09-07	2023-04-18	0
<input type="checkbox"/>		Modifica		Copia		Elimina	10	2	2	1800	2024/2025	2024-09-01	2025-06-06	0































```
CREATE TABLE Course (  
  CourseID INT NOT NULL AUTO_INCREMENT,  
  TutorID INT NOT NULL,  
  LocationID INT NOT NULL,  
  TotalHour INT NOT NULL,  
  SchoolYear VARCHAR(9) NOT NULL,  
  CreatedAt DATE NOT NULL,  
  UpdatedAt DATE NOT NULL,  
  IsDeleted BOOLEAN NOT NULL DEFAULT FALSE,  
  PRIMARY KEY (CourseID),  
  FOREIGN KEY (TutorID) REFERENCES Tutor(TutorID) ON DELETE RESTRICT ON UPDATE CASCADE,  
  FOREIGN KEY (LocationID) REFERENCES Location(LocationID) ON DELETE RESTRICT ON UPDATE CASCADE  
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_unicode_ci;
```

# TABELLA ENROLLMENT

<div><div><div><div></div><div></div><div></div></div></div><div></div></div>						EnrollmentID	StudentID	CourseID	EnrollmentDate	CompletionDate	IsDeleted	
<input type="checkbox"/>		Modifica		Copia		Elimina	1	280	1	2019-08-04	2020-11-02	0
<input type="checkbox"/>		Modifica		Copia		Elimina	2	112	1	2019-08-18	2020-06-29	0
<input type="checkbox"/>		Modifica		Copia		Elimina	3	218	1	2019-08-06	2020-07-16	0
<input type="checkbox"/>		Modifica		Copia		Elimina	4	53	1	2019-08-06	2020-08-22	0
<input type="checkbox"/>		Modifica		Copia		Elimina	5	377	1	2019-08-14	2020-10-09	0
<input type="checkbox"/>		Modifica		Copia		Elimina	6	425	1	2019-08-26	2020-08-07	0
<input type="checkbox"/>		Modifica		Copia		Elimina	7	335	1	2019-08-22	2020-10-03	0
<input type="checkbox"/>		Modifica		Copia		Elimina	8	385	1	2019-08-03	2020-06-18	0
<input type="checkbox"/>		Modifica		Copia		Elimina	9	127	1	2019-08-27	NULL	0
<input type="checkbox"/>		Modifica		Copia		Elimina	10	153	1	2019-08-06	2020-06-09	0
<input type="checkbox"/>		Modifica		Copia		Elimina	11	142	1	2019-08-22	NULL	0


































```
CREATE TABLE Enrollment (
  EnrollmentID INT NOT NULL AUTO_INCREMENT,
  StudentID INT NOT NULL,
  CourseID INT NOT NULL,
  EnrollmentDate DATE NOT NULL,
  CompletionDate DATE,
  IsDeleted BOOLEAN NOT NULL DEFAULT FALSE,
  PRIMARY KEY (EnrollmentID),
  FOREIGN KEY (StudentID) REFERENCES Student(StudentID) ON DELETE RESTRICT ON UPDATE CASCADE,
  FOREIGN KEY (CourseID) REFERENCES Course(CourseID) ON DELETE RESTRICT ON UPDATE CASCADE
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_unicode_ci;
```

# TABELLA MODULE

				ModuleID	TeacherID	FormativeUnitID	ModuleStateID	CourseID	ModuleName	StartDate	EndDate	IsDeleted	
<input type="checkbox"/>		Modifica	 Copia	 Elimina	1	3	4	1	1	Web Developer AI	2019-09-25	NULL	0
<input type="checkbox"/>		Modifica	 Copia	 Elimina	2	2	11	2	1	Web Developer AI	2019-09-02	2019-12-21	0
<input type="checkbox"/>		Modifica	 Copia	 Elimina	3	3	2	2	1	Web Developer AI	2019-09-07	2019-11-28	0
<input type="checkbox"/>		Modifica	 Copia	 Elimina	4	5	9	1	2	Web Developer AI	2021-09-12	NULL	0
<input type="checkbox"/>		Modifica	 Copia	 Elimina	5	3	5	1	2	Web Developer AI	2021-10-18	NULL	0
<input type="checkbox"/>		Modifica	 Copia	 Elimina	6	1	1	1	2	Web Developer AI	2021-10-26	NULL	0
<input type="checkbox"/>		Modifica	 Copia	 Elimina	7	8	5	2	3	Web Developer AI	2022-12-07	2023-02-10	0
<input type="checkbox"/>		Modifica	 Copia	 Elimina	8	4	1	2	3	Web Developer AI	2022-12-11	2023-04-10	0
<input type="checkbox"/>		Modifica	 Copia	 Elimina	9	4	9	2	3	Web Developer AI	2022-12-11	2023-01-21	0
<input type="checkbox"/>		Modifica	 Copia	 Elimina	10	4	12	2	3	Web Developer AI	2022-09-18	2023-01-02	0

```
CREATE TABLE Module (  
  ModuleID INT NOT NULL AUTO_INCREMENT,  
  TeacherID INT NOT NULL,  
  FormativeUnitID INT NOT NULL,  
  ModuleStateID INT NOT NULL,  
  CourseID INT NOT NULL,  
  ModuleName VARCHAR(150) NOT NULL,  
  StartDate DATE NOT NULL,  
  EndDate DATE,  
  IsDeleted BOOLEAN NOT NULL DEFAULT FALSE,  
  PRIMARY KEY (ModuleID),  
  FOREIGN KEY (TeacherID) REFERENCES Teacher(TeacherID) ON DELETE RESTRICT ON UPDATE CASCADE,  
  FOREIGN KEY (FormativeUnitID) REFERENCES FormativeUnit(FormativeUnitID) ON DELETE RESTRICT ON UPDATE CASCADE,  
  FOREIGN KEY (ModuleStateID) REFERENCES ModuleState(ModuleStateID) ON DELETE RESTRICT ON UPDATE CASCADE,  
  FOREIGN KEY (CourseID) REFERENCES Course(CourseID) ON DELETE RESTRICT ON UPDATE CASCADE  
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_unicode_ci;
```

# TABELLA VOTE

<div><div><div></div><div></div><div></div></div></div>						▼	VoteID	StudentID	ModuleID	FirstVote	SecondVote	FinalVote	IsDeleted
<input type="checkbox"/>		Modifica		Copia		Elimina	1	280	2	9	8	9	0
<input type="checkbox"/>		Modifica		Copia		Elimina	2	280	3	7	3	5	0
<input type="checkbox"/>		Modifica		Copia		Elimina	3	112	2	3	2	3	0
<input type="checkbox"/>		Modifica		Copia		Elimina	4	112	3	10	6	8	0
<input type="checkbox"/>		Modifica		Copia		Elimina	5	218	2	1	4	3	0
<input type="checkbox"/>		Modifica		Copia		Elimina	6	218	3	10	1	6	0
<input type="checkbox"/>		Modifica		Copia		Elimina	7	53	1	9	NULL	NULL	0
<input type="checkbox"/>		Modifica		Copia		Elimina	8	53	2	1	4	3	0
<input type="checkbox"/>		Modifica		Copia		Elimina	9	53	3	2	1	2	0
<input type="checkbox"/>		Modifica		Copia		Elimina	10	377	1	3	NULL	NULL	0
<input type="checkbox"/>		Modifica		Copia		Elimina	-	-	-	-	-	-	-

```
CREATE TABLE Vote (  
  VoteID INT NOT NULL AUTO_INCREMENT,  
  StudentID INT NOT NULL,  
  ModuleID INT NOT NULL,  
  FirstVote INT,  
  SecondVote INT,  
  FinalVote INT,  
  IsDeleted BOOLEAN NOT NULL DEFAULT FALSE,  
  PRIMARY KEY (VoteID),  
  FOREIGN KEY (StudentID) REFERENCES Student(StudentID) ON DELETE RESTRICT ON UPDATE CASCADE,  
  FOREIGN KEY (ModuleID) REFERENCES Module(ModuleID) ON DELETE RESTRICT ON UPDATE CASCADE  
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_unicode_ci;
```



# VISTA CARRIERA STUDENTE

StudentID	NomeCompleto	Email	Eta	CourseID	TipoCorso	AnnoScolastico	Sede	Citta	Datalscrizione	DataCompletamento	StatoCorso	OreTotali
42	Pietro Spanevello	rporzio@example.org	24	80	Web and Mobile Development	2024/2025	Caltagirone	Caltagirone	2024-08-24	2025-10-22	Completato	1800
42	Pietro Spanevello	rporzio@example.org	24	51	Web e Cybersecurity	2022/2023	Caltagirone	Caltagirone	2022-09-01	NULL	In corso	1800
42	Pietro Spanevello	rporzio@example.org	24	81	Web and Mobile Development	2020/2021	Catania	Catania	2020-08-30	2021-09-23	Completato	1800
42	Pietro Spanevello	rporzio@example.org	24	54	Digital Media Design	2019/2020	Catania	Catania	2019-09-03	NULL	In corso	1800

```
CREATE OR REPLACE VIEW Vista_Carriera_Studente AS
SELECT
    s.StudentID,
    CONCAT(ui.FirstName, ' ', ui.LastName) AS NomeCompleto,
    ui.Email,
    TIMESTAMPDIFF(YEAR, ui.BirthDate, CURDATE()) AS Eta,
    c.CourseID,
    m.ModuleName AS TipoCorso,
    c.SchoolYear AS AnnoScolastico,
    l.LocationName AS Sede,
    ct.CityName AS Citta,
    e.EnrollmentDate AS DataIscrizione,
    e.CompletionDate AS DataCompletamento,
    CASE
        WHEN e.CompletionDate IS NOT NULL THEN 'Completato'
        ELSE 'In corso'
    END AS StatoCorso,
    c.TotalHour AS OreTotali
FROM
    Student s
    INNER JOIN UserInfo ui ON s.UserInfoID = ui.UserInfoID
    INNER JOIN Enrollment e ON s.StudentID = e.StudentID
    INNER JOIN Course c ON e.CourseID = c.CourseID
    INNER JOIN Module m ON c.CourseID = m.CourseID
    INNER JOIN Location l ON c.LocationID = l.LocationID
    INNER JOIN City ct ON l.CityID = ct.CityID
WHERE
    s.StudentID = 42
    AND s.IsDeleted = 0
    AND ui.IsDeleted = 0
    AND e.IsDeleted = 0
    AND c.IsDeleted = 0
GROUP BY
    s.StudentID, c.CourseID, m.ModuleName, c.SchoolYear,
    l.LocationName, ct.CityName, e.EnrollmentDate, e.CompletionDate,
    c.TotalHour, ui.FirstName, ui.LastName, ui.Email, ui.BirthDate
ORDER BY
    e.EnrollmentDate DESC;

-- Utilizzo: SELECT * FROM Vista_Carriera_Studente;
```

# VISTA CLASSIFICA STUDENTI

StudentID	NomeCompleto	Email	Eta	Citta	NumeroCorsiFrequentati	NumeroVoti	MediaGenerale	MediaPrimiVoti	MediaSecondiVoti	VotoMinimo	VotoMassimo	VotiSufficienti	VotiInsufficienti
304	Costantino Crespi	balbiclaudia@example.org	21	Callagirone	2	8	8.50	9.25	7.25	7	9	8	0
410	Franco Mastroianni	maria88@example.org	22	Callagirone	4	20	8.00	7.20	8.60	6	10	20	0
309	Serena Campise	nicola29@example.com	22	Palermo	3	18	7.83	7.83	7.50	5	10	15	3
71	Lucio Pratesi	tcontarini@example.com	34	Catania	3	24	7.50	7.50	7.13	5	10	21	3
48	Donatello Paolini	ettorefabbrri@example.net	18	Callagirone	3	12	7.50	8.25	6.00	6	8	12	0
469	Gianfranco Gallazzo	ronaldocorrer@example.org	27	Palermo	1	5	7.40	6.20	7.60	6	10	5	0
289	Jacopo Mannoia	qmagrassi@example.org	30	Catania	5	75	7.27	6.67	7.13	3	10	65	10
224	Giuseppina Franzese	vramazzotti@example.net	27	Palermo	2	8	7.25	6.75	7.25	6	10	8	0
179	Pellegrino Canevascini	angelina14@example.net	24	Palermo	5	60	7.17	6.75	7.25	3	10	45	15
133	Victoria Vasari	giuseppeborsellino@example.net	26	Catania	3	36	7.00	5.67	7.83	4	10	27	9
424	Martino Modugno	uchiaramonte@example.net	32	Palermo	3	24	7.00	5.75	7.63	5	9	21	3
493	Camillo Trapani	eleanoraroth@example.org	25	Palermo	3	18	7.00	7.00	6.33	1	9	15	3
310	Lucio Zoppetto	parmitanoaugusto@example.com	34	Callagirone	3	9	7.00	8.33	5.00	7	7	9	0
366	Annalisa Federico	lpalumbo@example.net	27	Palermo	5	70	6.93	6.50	7.00	4	10	55	15

```
CREATE OR REPLACE VIEW Vista_Classifica_Studenti AS
SELECT
    s.StudentID,
    CONCAT(ui.FirstName, ' ', ui.LastName) AS NomeCompleto,
    ui.Email,
    TIMESTAMPDIFF(YEAR, ui.BirthDate, CURDATE()) AS Eta,
    ct.CityName AS Citta,
    COUNT(DISTINCT e.CourseID) AS NumeroCorsiFrequentati,
    COUNT(v.VoteID) AS NumeroVoti,
    ROUND(AVG(v.FinalVote), 2) AS MediaGenerale,
    ROUND(AVG(v.FirstVote), 2) AS MediaPrimiVoti,
    ROUND(AVG(v.SecondVote), 2) AS MediaSecondiVoti,
    MIN(v.FinalVote) AS VotoMinimo,
    MAX(v.FinalVote) AS VotoMassimo,
    COUNT(CASE WHEN v.FinalVote >= 6 THEN 1 END) AS VotiSufficienti,
    COUNT(CASE WHEN v.FinalVote < 6 THEN 1 END) AS VotiInsufficienti
FROM
    Student s
    INNER JOIN UserInfo ui ON s.UserInfoID = ui.UserInfoID
    INNER JOIN City ct ON ui.CityID = ct.CityID
    INNER JOIN Enrollment e ON s.StudentID = e.StudentID
    INNER JOIN Vote v ON s.StudentID = v.StudentID
WHERE
    s.IsDeleted = 0
    AND ui.IsDeleted = 0
    AND v.IsDeleted = 0
    AND v.FinalVote IS NOT NULL
GROUP BY
    s.StudentID, ui.FirstName, ui.LastName, ui.Email,
    ui.BirthDate, ct.CityName
HAVING
    COUNT(v.VoteID) > 0
ORDER BY
    MediaGenerale DESC, NumeroVoti DESC;
```

# VISTA ESITI MATERIA CORSO

<div><div><div></div><div></div></div></div>			CourseID	TipoCorso	AnnoScolastico	Materia	StudentID	Nome Studente	PrimoVoto	SecondoVoto	VotoFinale	Esito	StatoModulo				
<input type="checkbox"/>		Modifica		Copia		Elimina	15	Web Developer AI	2019/2020	React	92	Pierpaolo Ossola	10	10	10	Sufficiente	Completato
<input type="checkbox"/>		Modifica		Copia		Elimina	15	Web Developer AI	2019/2020	React	400	Maurilio Garobbio	9	8	9	Sufficiente	Completato
<input type="checkbox"/>		Modifica		Copia		Elimina	15	Web Developer AI	2019/2020	React	116	Lazzaro Maderna	9	8	9	Sufficiente	Completato
<input type="checkbox"/>		Modifica		Copia		Elimina	15	Web Developer AI	2019/2020	React	473	Pierangelo Castiglione	7	10	9	Sufficiente	Completato
<input type="checkbox"/>		Modifica		Copia		Elimina	15	Web Developer AI	2019/2020	React	443	Nanni Gabrieli	10	5	8	Sufficiente	Completato
<input type="checkbox"/>		Modifica		Copia		Elimina	15	Web Developer AI	2019/2020	React	170	Ettore Colodi	6	10	8	Sufficiente	Completato
<input type="checkbox"/>		Modifica		Copia		Elimina	15	Web Developer AI	2019/2020	React	162	Galasso Paltrinieri	7	6	7	Sufficiente	Completato
<input type="checkbox"/>		Modifica		Copia		Elimina	15	Web Developer AI	2019/2020	React	206	Silvio Boiardo	9	3	6	Sufficiente	Completato
<input type="checkbox"/>		Modifica		Copia		Elimina	15	Web Developer AI	2019/2020	React	300	Claudio Tornatore	9	2	6	Sufficiente	Completato
<input type="checkbox"/>		Modifica		Copia		Elimina	15	Web Developer AI	2019/2020	React	114	Temistocle Casarin	8	3	6	Sufficiente	Completato
<input type="checkbox"/>		Modifica		Copia		Elimina	15	Web Developer AI	2019/2020	React	60	Pasquale Tartini	9	3	6	Sufficiente	Completato
<input type="checkbox"/>		Modifica		Copia		Elimina	15	Web Developer AI	2019/2020	React	447	Umberto Cammarata	4	7	6	Sufficiente	Completato
<input type="checkbox"/>		Modifica		Copia		Elimina	15	Web Developer AI	2019/2020	React	65	Agnolo Mancini	9	3	6	Sufficiente	Completato
<input type="checkbox"/>		Modifica		Copia		Elimina	15	Web Developer AI	2019/2020	React	151	Ippazio Turrini	8	1	5	Insufficiente	Completato
<input type="checkbox"/>		Modifica		Copia		Elimina	15	Web Developer AI	2019/2020	React	115	Aurora Cugia	5	2	4	Insufficiente	Completato
<input type="checkbox"/>		Modifica		Copia		Elimina	15	Web Developer AI	2019/2020	React	346	Ranieri Almagià	2	5	4	Insufficiente	Completato
<input type="checkbox"/>		Modifica		Copia		Elimina	15	Web Developer AI	2019/2020	React	236	Amadeo Rubbia	3	2	3	Insufficiente	Completato

```
CREATE OR REPLACE VIEW Vista_Esiti_Materia_Corso AS
SELECT
  c.CourseID,
  m.ModuleName AS TipoCorso,
  c.SchoolYear AS AnnoScolastico,
  fu.UnitName AS Materia,
  s.StudentID,
  CONCAT(ui.FirstName, ' ', ui.LastName) AS NomeStudente,
  v.FirstVote AS PrimoVoto,
  v.SecondVote AS SecondoVoto,
  v.FinalVote AS VotoFinale,
  CASE
    WHEN v.FinalVote >= 6 THEN 'Sufficiente'
    WHEN v.FinalVote < 6 AND v.FinalVote IS NOT NULL THEN 'Insufficiente'
    ELSE 'Non valutato'
  END AS Esito,
  ms.State AS StatoModulo
FROM
  Course c
  INNER JOIN Module m ON c.CourseID = m.CourseID
  INNER JOIN FormativeUnit fu ON m.FormativeUnitID = fu.FormativeUnitID
  INNER JOIN Vote v ON m.ModuleID = v.ModuleID
  INNER JOIN Student s ON v.StudentID = s.StudentID
  INNER JOIN UserInfo ui ON s.UserInfoID = ui.UserInfoID
  INNER JOIN ModuleState ms ON m.ModuleStateID = ms.ModuleStateID
WHERE
  c.CourseID = 15
  AND fu.UnitName = 'React'
  AND c.IsDeleted = 0
  AND m.IsDeleted = 0
  AND v.IsDeleted = 0
  AND s.IsDeleted = 0
ORDER BY
  v.FinalVote DESC;

-- Utilizzo: SELECT * FROM Vista_Esiti_Materia_Corso;
```

# VISTA MEDIA VOTI MATERIA CORSO

CourseID	TipoCorso	AnnoScolastico	Sede	Materia	Docente	NumeroStudentiValutati	MediaVotoFinale	StatoModulo
1	Web Developer AI	2019/2020	Caltagirone	Angular	Arnaldo Jacuzzi	11	NULL	In corso
1	Web Developer AI	2019/2020	Caltagirone	Legislazione di settore	Adriana Fanucci	24	5.88	Completato
1	Web Developer AI	2019/2020	Caltagirone	Sicurezza sul lavoro	Arnaldo Jacuzzi	27	5.67	Completato
2	Web Developer AI	2021/2022	Caltagirone	Cloud computing	Arnaldo Jacuzzi	8	NULL	In corso
2	Web Developer AI	2021/2022	Caltagirone	Matematica	Ermes Celentano	8	NULL	In corso
2	Web Developer AI	2021/2022	Caltagirone	PHP	Fabia Stein	10	NULL	In corso
3	Web Developer AI	2022/2023	Palermo	Cloud computing	Adele Roth	22	5.32	Completato
3	Web Developer AI	2022/2023	Palermo	Matematica	Aria Jacuzzi	24	6.17	Completato
3	Web Developer AI	2022/2023	Palermo	PHP	Aria Jacuzzi	22	5.23	Completato
3	Web Developer AI	2022/2023	Palermo	Web Architecture & Backend	Aria Jacuzzi	24	5.71	Completato
4	Web Developer AI	2023/2024	Caltagirone	Angular	Venancio Serraglio	19	5.84	Completato
4	Web Developer AI	2023/2024	Caltagirone	Data Analysis	Adriana Fanucci	17	5.82	Completato
4	Web Developer AI	2023/2024	Caltagirone	Inglese	Adriana Fanucci	19	6.32	Completato
4	Web Developer AI	2023/2024	Caltagirone	PHP	Arnaldo Jacuzzi	17	5.18	Completato
5	Web Developer AI	2021/2022	Catania	Angular	Venancio Serraglio	22	5.14	Completato

```
CREATE OR REPLACE VIEW Vista_Media_Voti_Materia_Corso AS
SELECT
    c.CourseID,
    m.ModuleName AS TipoCorso,
    c.SchoolYear AS AnnoScolastico,
    l.LocationName AS Sede,
    fu.UnitName AS Materia,
    CONCAT(t_ui.FirstName, ' ', t_ui.LastName) AS Docente,
    COUNT(v.VoteID) AS NumeroStudentiValutati,
    ROUND(AVG(v.FinalVote), 2) AS MediaVotoFinale,
    ROUND(AVG(v.FirstVote), 2) AS MediaPrimoVoto,
    ROUND(AVG(v.SecondVote), 2) AS MediaSecondoVoto,
    MIN(v.FinalVote) AS VotoMinimo,
    MAX(v.FinalVote) AS VotoMassimo,
    ms.State AS StatoModulo
FROM
    Course c
    INNER JOIN Module m ON c.CourseID = m.CourseID
    INNER JOIN FormativeUnit fu ON m.FormativeUnitID = fu.FormativeUnitID
    INNER JOIN ModuleState ms ON m.ModuleStateID = ms.ModuleStateID
    INNER JOIN Teacher t ON m.TeacherID = t.TeacherID
    INNER JOIN UserInfo t_ui ON t.UserInfoID = t_ui.UserInfoID
    INNER JOIN Location l ON c.LocationID = l.LocationID
    LEFT JOIN Vote v ON m.ModuleID = v.ModuleID AND v.IsDeleted = 0
WHERE
    c.IsDeleted = 0
    AND m.IsDeleted = 0
GROUP BY
    c.CourseID, m.ModuleName, c.SchoolYear, l.LocationName,
    fu.UnitName, t_ui.FirstName, t_ui.LastName, ms.State
HAVING
    COUNT(v.VoteID) > 0
ORDER BY
    c.CourseID, fu.UnitName;

-- Esempio di utilizzo con filtro specifico:
-- SELECT * FROM Vista_Media_Voti_Materia_Corso WHERE CourseID = 10;
```



# VISTA STUDENTI OVER30 MERITO

StudentID	NomeCompleto	Email	DataNascita	Eta	Citta	Provincia	NumeroCorsiFrequentati	NumeroVoti	MediaGenerale	VotoMinimo	VotoMassimo	GiudizioComplessivo	CorsiFrequentati
71	Lucio Pratesi	tcontarini@example.com	1991-08-09	34	Catania	Catania	3	8	7.50	5	10	Buono	Industry 4.0, Web and Mobile Development, Web Deve...
424	Martino Modugno	uchiaramonte@example.net	1992-11-18	32	Palermo	Palermo	3	8	7.00	5	9	Buono	Industry 4.0, Web and Mobile Development, Web Deve...
310	Lucio Zoppetto	parmitanoaugusto@example.com	1990-11-26	34	Caltagirone	Catania	2	3	7.00	7	7	Buono	Web and Mobile Development, Web Developer AI
77	Ettore Zarino	antonellapellegriini@example.net	1990-03-14	35	Caltagirone	Catania	4	10	6.90	4	10	Sufficiente	Industry 4.0, Web and Mobile Development
205	Angelica Storiadi	marangoniromana@example.net	1993-02-21	32	Palermo	Palermo	4	16	6.88	2	10	Sufficiente	Industry 4.0, Web and Mobile Development, Web Deve...
327	Fabio Faranda	vittoria72@example.org	1993-01-02	32	Catania	Catania	4	11	6.73	4	9	Sufficiente	Industry 4.0, Web Developer AI
436	Tiziana Caetani	ncomoli@example.com	1993-04-07	32	Caltagirone	Catania	2	7	6.71	4	10	Sufficiente	Web and Mobile Development, Web Developer AI
356	Giancarlo Carducci	piero75@example.org	1990-02-23	35	Catania	Catania	3	7	6.71	5	10	Sufficiente	Industry 4.0, Web Developer AI
94	Venancio Boccaccio	lara91@example.com	1990-11-24	34	Caltagirone	Catania	4	10	6.70	5	8	Sufficiente	Industry 4.0, Web and Mobile Development, Web Deve...
112	Eugenia Modiano	giulio43@example.org	1993-03-26	32	Palermo	Palermo	4	9	6.67	3	10	Sufficiente	Web and Mobile Development, Web Developer AI, Web ...
409	Manuel Satta	marissa23@example.net	1990-10-12	35	Catania	Catania	4	8	6.63	4	9	Sufficiente	Industry 4.0, Web and Mobile Development, Web e Cy...

```
CREATE OR REPLACE VIEW Vista_Studenti_Over30_Merito AS
SELECT
    s.StudentID,
    CONCAT(ui.FirstName, ' ', ui.LastName) AS NomeCompleto,
    ui.Email,
    ui.BirthDate AS DataNascita,
    TIMESTAMPDIFF(YEAR, ui.BirthDate, CURDATE()) AS Eta,
    ct.CityName AS Citta,
    p.ProvinceName AS Provincia,
    COUNT(DISTINCT e.CourseID) AS NumeroCorsiFrequentati,
    COUNT(v.VoteID) AS NumeroVoti,
    ROUND(AVG(v.FinalVote), 2) AS MediaGenerale,
    MIN(v.FinalVote) AS VotoMinimo,
    MAX(v.FinalVote) AS VotoMassimo,
    CASE
        WHEN AVG(v.FinalVote) >= 9 THEN 'Eccellente'
        WHEN AVG(v.FinalVote) >= 8 THEN 'Ottimo'
        WHEN AVG(v.FinalVote) >= 7 THEN 'Buono'
        WHEN AVG(v.FinalVote) >= 6 THEN 'Sufficiente'
        ELSE 'Insufficiente'
    END AS GiudizioComplessivo,
    GROUP_CONCAT(DISTINCT m.ModuleName ORDER BY m.ModuleName SEPARATOR ', ') AS CorsiFrequentati
FROM
    Student s
    INNER JOIN UserInfo ui ON s.UserInfoID = ui.UserInfoID
    INNER JOIN City ct ON ui.CityID = ct.CityID
    INNER JOIN Province p ON ct.ProvinceID = p.ProvinceID
    INNER JOIN Enrollment e ON s.StudentID = e.StudentID
    INNER JOIN Course c ON e.CourseID = c.CourseID
    INNER JOIN Module m ON c.CourseID = m.CourseID
    INNER JOIN Vote v ON s.StudentID = v.StudentID AND m.ModuleID = v.ModuleID
WHERE
    s.IsDeleted = 0
    AND ui.IsDeleted = 0
    AND v.IsDeleted = 0
    AND v.FinalVote IS NOT NULL
    AND TIMESTAMPDIFF(YEAR, ui.BirthDate, CURDATE()) > 30
GROUP BY
    s.StudentID, ui.FirstName, ui.LastName, ui.Email,
    ui.BirthDate, ct.CityName, p.ProvinceName
HAVING
    COUNT(v.VoteID) > 0
ORDER BY
    MediaGenerale DESC, NumeroVoti DESC, Eta ASC;
```