University of British Columbia
Department of Computer Science

CPSC 304 S1 2019

Group Project - Implementation of a Relational Database
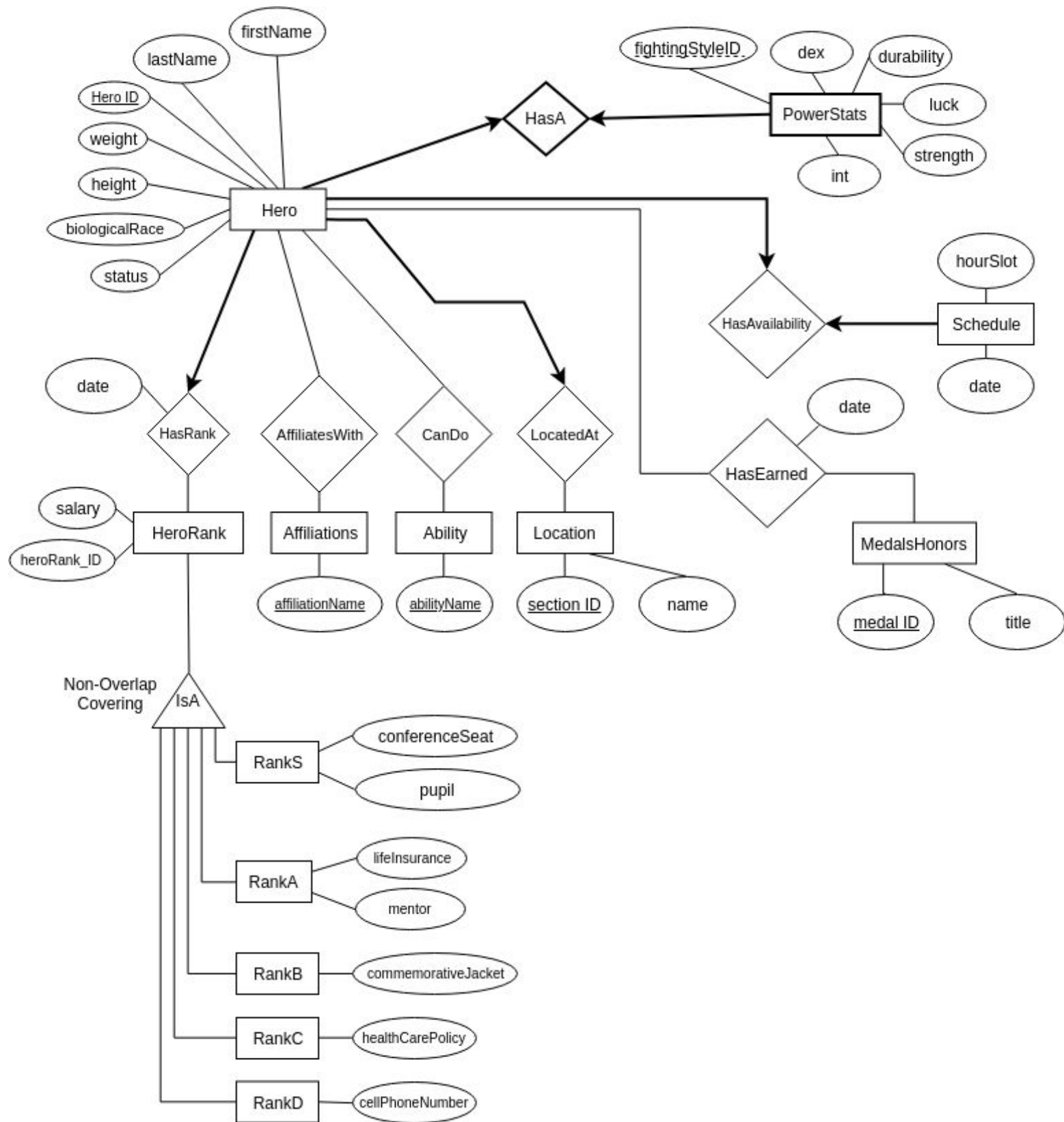
Project Title:	Hero Database
Project Milestone:	Milestone 2

#	Student Name	Student Number	CS Userid	Tutorial Section	Email Address
1	Lian Duan	76385988	v8j1b	T1F	Lian.Duan@alumni.ubc.ca
2	Shahbano Bhatti	43503119	v8v0b	T1F	shahbanobhatti@yahoo.com
3	Shabab Khan	10859130	c7s1b	T1A	khan.k.shabab@gmail.com
4	Alex Qin	53507067	w1m2b	T1C	qinxuchen@gmail.com

By typing our names and student numbers in the above table, we certify that the work in the attached assignment was performed solely by those whose names and student IDs are included above.

In addition, we indicate that we are fully aware of the rules and consequences of plagiarism, as set forth by the Department of Computer Science and the University of British Columbia

ER Diagram:

Relational Model:

Hero (
        firstName CHAR(24),
        lastName CHAR (24)
        Hero_ID INTEGER,
        weight REAL,
        height REAL,
        biologicalRace CHAR (7),
        status CHAR (7),
        CANDIDATE KEYS (firstName,lastName), Hero_ID
        PRIMARY KEY (Hero_ID)
)

PowerStats (
        fightingStyleID INTEGER,
        Hero_ID INTEGER,
        dex INTEGER,
        durability INTEGER,
        luck INTEGER,
        strength INTEGER,
        intelligence INTEGER,
        PRIMARY KEY (fightingStyleID, Hero_ID),
        FOREIGN KEY (Hero_ID) References Hero
        ON DELETE CASCADE
)

Schedule (
        hourSlot CHAR (10),
        date DATE,
        Hero_ID INTEGER,
        PRIMARY KEY (Hero_ID)
        FOREIGN KEY (Hero_ID) References Hero
        ON DELETE CASCADE
)

Medal Honors (
        medal_ID INTEGER,
        title CHAR(20),
        PRIMARY KEY (medal_ID)
)

HasEarnedMedal (
        medal_ID INTEGER,
        Hero_ID INTEGER,
        date DATE,
        PRIMARY KEY (Hero_ID, medal_ID),
        FOREIGN KEY (medal_ID) References Hero,
        ON DELETE CASCADE
        FOREIGN KEY (Hero_ID) References Hero
        ON DELETE SET NULL
)

Location (
        Section_ID INTEGER,
        name CHAR(20)
        PRIMARY KEY (Section_ID),
        Hero_ID INTEGER UNIQUE,
        FOREIGN KEY (Hero_ID) References Hero,
        ON DELETE CASCADE
)

Ability (
        abilityName CHAR(20),
        Hero_ID INTEGER,
        PRIMARY KEY (abilityName, Hero_ID),
        FOREIGN KEY (Hero_ID) References Hero
)

Affiliations (
        affiliationName CHAR(20),
        Hero_ID INTEGER,
        PRIMARY KEY (affiliationName, Hero_ID),
        FOREIGN KEY (Hero_ID) References Hero
        ON DELETE CASCADE
)

Hero Rank (
        salary INTEGER,
        HeroRank_ID INTEGER,
)

HasRank (
        Hero_ID INTEGER,
        HeroRank_ID INTEGER,
        Date DATE,
        PRIMARY KEY (Hero_ID),
        FOREIGN KEY (Hero_ID) References Hero
        ON DELETE CASCADE,
        FOREIGN KEY (HeroRank_ID) References Hero
        ON DELETE SET NULL
)

RankS (
       heroRank_ID INTEGER,
       conferenceSeat CHAR(10),
       Pupil CHAR (20),
       PRIMARY KEY (HeroRank_ID),
       FOREIGN KEY (HeroRank_ID) References Hero
       ON DELETE CASCADE
)

RankA (
       heroRank_ID INTEGER,
       lifeInsurance CHAR(14),
       Mentor CHAR (20),
       PRIMARY KEY (HeroRank_ID),
       FOREIGN KEY (HeroRank_ID) References Hero
       ON DELETE CASCADE
)

RankB (
       heroRank_ID INTEGER,
       commemorativeJacket CHAR(14),
       PRIMARY KEY (HeroRank_ID),
       FOREIGN KEY (HeroRank_ID) References Hero
       ON DELETE CASCADE
)

RankC (
       heroRank_ID INTEGER,
       healthCarePolicy CHAR (20),
       PRIMARY KEY (HeroRank_ID),
       FOREIGN KEY (HeroRank_ID) References Hero
       ON DELETE CASCADE
)
RankD (
       heroRank_ID INTEGER,
       cellPhoneNumber CHAR(16),
       PRIMARY KEY (HeroRank_ID),
       FOREIGN KEY (HeroRank_ID) References Hero
       ON DELETE CASCADE
)