

**Appendix A**

**UNF**

**Carnival(date, director, location(The Tan, Botanic Gardens...), event(10km run, 5km run, 3km run), sponsors(sponsor1(vegout), sponsor2(Dept..)))**

**1NF**

**Carnival(date, diirector)**

**Location(carnival\_date, location\_name)**

**Event(carnival\_date, event\_name)**

**Sponsor(carnival\_date, sponsor\_name, isNaming, amount, contact, contact)**

**2NF**

**Carnival(date, diirector)**

**Location(carnival\_date, location\_name)**

**Event(carnival\_date, event\_name)**

**Sponsor(carnival\_date, sponsor\_name, isNaming, amount, contact, contact)**

**3NF**

**Carnival(date, diirector)**

**Location(carnival\_date, location\_name)**

**Event(carnival\_date, event\_name)**

**Sponsor(carnival\_date, sponsor\_name, isNaming, amount, contact, contact)**

**Appendix B**

**UNF**

**Competitor(number, firstname, lastname, gender, birthday, email, isStudent, mobile, Medicial(condition, area(breathing, hearing, heart...), Emergency(firstname, lastname, phone, relationship,Guardian(firstname, lastname, phone))**

**1NF**

**Competitor(number, firstname, lastname, gender, birthday, email, isStudent, mobile)**

**Medical(competitor\_number, condition, areas)**

**EmergencyContact(competitor\_number, firstname, lastname, phone, relationship)**

**Guardian(competitor\_number, firstname, lastname, phone)**

**2NF**

**Competitor(number, firstname, lastname, gender, birthday, email, isStudent, mobile)**

**Medical(competitor\_number, condition, areas)**

**EmergencyContact(competitor\_number, firstname, lastname, phone, relationship)**

**Guardian(competitor\_number, firstname, lastname, phone)**

**3NF**

**Competitor(number, firstname, lastname, gender, birthday, email, isStudent, mobile)**

**Medical(competitor\_number, condition, areas)**

**EmergencyContact(competitor\_number, firstname, lastname, phone, relationship)**

**Guardian(competitor\_number, firstname, lastname, phone)**

**Appendix C**

**UNF**

**Entry(competitor\_number, firstname, lastname, event, teamname)**

**1NF**

**Entry(competitor\_number, firstname, lastname, event\_name, teamname)**

**2NF**

**Competitor\_number -> firstname partial**

**Competitor\_number -> lastname partial**

**Entry(competitor\_number, event, teamname)**

**3NF**

**Entry(competitor\_number, event, teamname)**

**Appendix D**

**UNF**

**Order(order\_number, order\_date, carnival\_date, carnival\_location, competitor(number, name), merchandise(good1, good2), total\_cost)**

**1NF**

**Order(order\_number, order\_date, carnival\_date, carnival\_location, competitor\_number, competitor\_name, total\_cost, delivery)**

**Merchandise(order\_number, item\_code, item\_description, cost, qty,line\_cost)**

**2NF**

**Carnival\_date -> carnival\_location partial**

**Competitior\_number -> competitior\_name partial**

**Order(order\_number, order\_date, carnival\_date, competitor\_number)**

**Merchandise(order\_number, item\_code, item\_description, cost, qty,line\_cost)**

**3NF**

**Order(order\_number, order\_date, carnival\_date, competitor\_number)**

**Merchandise(order\_number, item\_code, item\_description, cost, qty,line\_cost)**

**Appendix E**

**UNF**

**Order(order\_number, order\_date, carnival\_date, carnival\_location, Volunteerr(number, name), merchandise(good1, good2), total\_cost)**

**1NF**

**Order(order\_number, order\_date, carnival\_date, carnival\_location, volunteer\_number, volunteer\_name, total\_cost, delivery)**

**Volunteer(volunteer\_number, volunteer\_name)**

**Merchandise(order\_number, item\_code, item\_description, cost, qty,line\_cost)**

**2NF**

**Carnival\_date -> carnival\_location partial**

**volunteer\_number -> volunteer\_name partial**

**Volunteer(volunteer\_number, volunteer\_name)**

**Order(order\_number, order\_date, carnival\_date, volunteer\_number)**

**Merchandise(order\_number, item\_code, item\_description, cost, qty,line\_cost)**

**3NF**

**Volunteer(volunteer\_number, volunteer\_name)**

**Order(order\_number, order\_date, carnival\_date, volunteer\_number)**

**Merchandise(order\_number, item\_code, item\_description, cost, qty,line\_cost)**

**Final Relations:**

**Carnival(date, diirector)**

**Location(carnival\_date, location\_name)**

**Event(carnival\_date, event\_name)**

**Sponsor(carnival\_date, sponsor\_name, isNaming, amount, contact, phone)**

**Competitor(number, firstname, lastname, gender, birthday, email, isStudent, mobile)**

**Medical(competitor\_number, condition, areas)**

**EmergencyContact(competitor\_number, firstname, lastname, phone, relationship)**

**Guardian(competitor\_number, firstname, lastname, phone)**

**Entry(competitor\_number, event\_name, teamname)**

**Volunteer(volunteer\_number, volunteer\_name)**

**Order(order\_number, order\_date, carnival\_date, volunteer\_number)**

**Merchandise(order\_number, item\_code, item\_description, cost, qty,line\_cost)**