

## Appendix A

- UNF

CARNIVAL(cdate, director, location, events, {sponsorname, isNaming, sponsoramount, sponsorcontact, sponsorphone})

- 1NF

CARNIVAL(cdate, director, location, events, sponsorname, isNaming, sponsoramount, sponsorcontact)

sponsorname -> isNaming TRANSITIVE

sponsorname -> amount TRANSITIVE

sponsorname -> sponsorcontact TRANSITIVE

sponsorname -> sponsorphone TRANSITIVE

- 2NF

CARNIVAL(cdate, director, location, events)

SPONSOR(sponsorname, isNaming, sponsoramount, sponsorcontact)

- 3NF

CARNIVAL(cdate, director, location, events)

SPONSOR(sponsorname, isNaming, sponsoramount, sponsorcontact, sponsorphone)

## Appendix B

- UNF

COMPETITOR(cnumber, cfirstname, clastname, cname, cgender, cbirthday, cemail, clsStu, cMobile, clsAnyCondition, cArea, ecfirstname, eclastname, ename, ecphone, ecolation, gfirstname, glastname, gname, gphone)

- 1NF

COMPETITOR(cnumber, cfirstname, clastname, cname, cgender, cbirthday, cemail, clsStu, cMobile, clsAnyCondition, cArea, ecfirstname, eclastname, ename, ecphone, ecolation, gfirstname, glastname, gname, gphone)

- 2NF

COMPETITOR(cnumber, cfirstname, clastname, cname, cgender, cbirthday, cemail, clsStu, cMobile, clsAnyCondition, cArea, ecfirstname, eclastname, ename, ecphone, ecolation, gfirstname, glastname, gname, gphone)

- 3NF

COMPETITOR(cnumber, cfirstname, clastname, cname, cgender, cbirthday, cemail, clsStu, cMobile, clsAnyCondition, cArea, ecfirstname, eclastname, ename, ecphone, ecolation, gfirstname, glastname, gname, gphone)

## Appendix C

- UNF

ENTRY(enumber, cnumber, cfirstname, clastname, cname, event, teamname)

- 1NF

ENTRY(enumber, cnumber, cfirstname, clastname, cname, event, teamname)

cnumber -> cfirstname TRANSITIVE

cnumber -> clastname TRANSITIVE

cnumber -> cname TRANSITIVE

- 2NF

ENTRY(enumber, cnumber, cfirstname, clastname, cname, event, teamname)

- 3NF

ENTRY(enumber, cnumber, event, teamname)

## Appendix D

- UNF

ORDER(cdate, location, ordernumber, orderdate, cnumber, cname, {Itemcode, ItemDescription, cost, qtn, linecost}, delivery, totalCost)

- 1NF

ORDER(cdate, location, ordernumber, orderdate, cnumber, cname, delivery, totalCost)

MERCHANDISE(ordernumber, itemcode, ItemDescription, cost, qtn, linecost)

cdate -> location TRANSITIVE

cnumber -> cname TRANSITIVE

ordernumber, itemcode -> itemDescription PARTIAL

ordernumber, itemcode -> cost PARTIAL

- 2NF

ORDER(cdate, location, ordernumber, orderdate, cnumber, cname, delivery, totalCost)

MERCHANDISE(ordernumber, itemcode, qtn, linecost)

ITEM(itemcode, itemdescription, itemcost)

- 3NF

ORDER(cdate, ordernumber, orderdate, cnumber, delivery, totalCost)

MERCHANDISE(ordernumber, itemcode, qtn, linecost)

ITEM(itemcode, itemdescription, itemcost)

## Appendix E

- UNF

ORDER(cdate, location, ordernumber, orderdate, vnumber, vname, {Itemcode, ItemDescription, cost, qtn, linecost}, delivery, totalCost)

- 1NF

ORDER(cdate, location, ordernumber, orderdate, vnumber, vname, delivery, totalCost)

MERCHANDISE(ordernumber, itemcode, ItemDescription, cost, qtn, linecost)

cdate -> location TRANSITIVE

vnumber -> vname TRANSITIVE

ordernumber, itemcode -> itemDescription PARTIAL

ordernumber, itemcode -> cost PARTIAL

- 2NF

ORDER(cdate, location, ordernumber, orderdate, vnumber, vname, delivery, totalCost)

MERCHANDISE(ordernumber, itemcode, qtn, linecost)

ITEM(itemcode, itemdescription, itemcost)

- 3NF

ORDER(cdate, ordernumber, orderdate, vnumber, delivery, totalCost)

MERCHANDISE(ordernumber, itemcode, qtn, linecost)

ITEM(itemcode, itemdescription, itemcost)

VOLUNTEER(vnumber, vname)

## Final

CARNIVAL(cdate, director, location, events)

SPONSOR(sponsorname, isNaming, sponsoramount, sponsorcontact, sponsorphone)

COMPETITOR(cnumber, cfirstname, clastname, cname, cgender, cbirthday, cemail, clsStu, cMobile, clsAnyCondition, cArea, ecfirstname, eclastname, ename, ecphone, ecolation, gfirstname, glastname, gname, gphone)

ENTRY(enumber, cnumber, event, teamname)

ORDER(cdate, ordernumber, orderdate, cvnumber, delivery, totalCost)

MERCHANDISE(ordernumber, itemcode, qtn, linecost)

ITEM(itemcode, itemdescription, itemcost)

VOLUNTEER(vnumber, vname)