1/ 1NF

CLIENT is in 1NF because there is no repeating group.

PROJECT is not in 1NF because there is the repeating group CONSULTANT.

Change PROJECT into:

PROJECT1(PID, pname, ConsultantID, consultantName, Project\_start\_date, clientNo, clientName)

Design in 1NF is CLIENT, PROJECT1.

2/2NF

CLIENT is in 2NF because it is in 1NF and the PK is single.

PROJECT1 is not in 2NF because there is partial dependency (projectname depends on PId ONLY). Divide Project1 into 3 parts

PROJECT2(PID, projectname, clientNo, clientName)

CONSULTANT2(ConsultantID, consultantName)

PROJECT\_CONSULTANT2(PID, ConsultantID, Project\_start\_date)

Design in 2NF is CLIENT, PROJECT2, CONSULTANT2, PROJECT\_CONSULTANT2

3/ 3NF

Client, consultant2, project\_consultant2 are in 3NF because there is no none-key depends on another none-key.

PROJECT2 is not in 3NF because clientName depends on ClientNo which is a none-key.

Divide PROJECT2 into 2 parts:

CLIENT3(clientNo, clientName) X redondance

PROJECT3(PID, projectname, clientNo)

Design in 3NF is CLIENT, PROJECT3, CONSULTANT2, PROJECT\_CONSULTANT2.

CLIENT ---E PROJECT ---E PROJECT\_CONSUTANT 3--- CONSULTANT

CLIENT pk = ClientNo

PROJECT pk = PID

Fk = ClientNo

PROJECT\_CONSUTANT

Pk = PID, ConsutantID (composit PK)

Fk1 = PID, Fk2 = ConsutantID