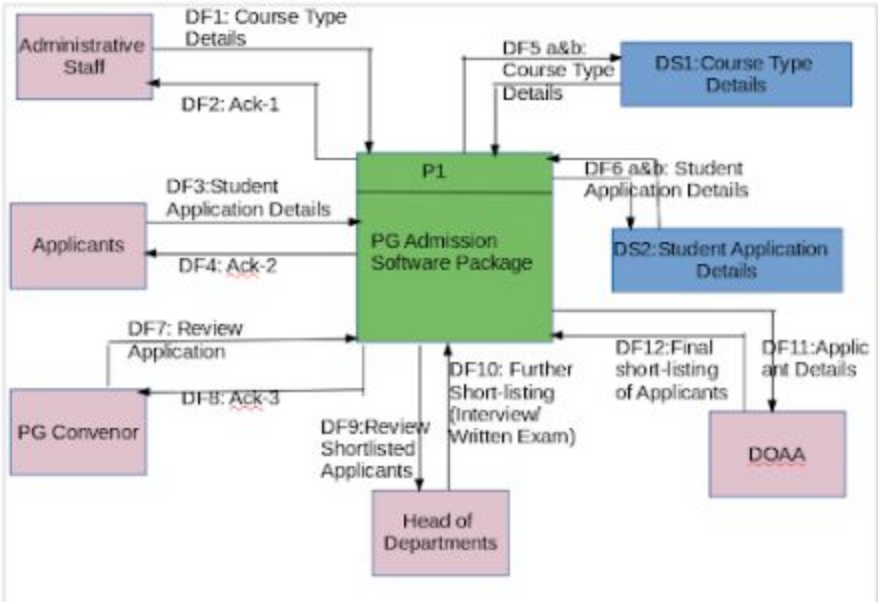
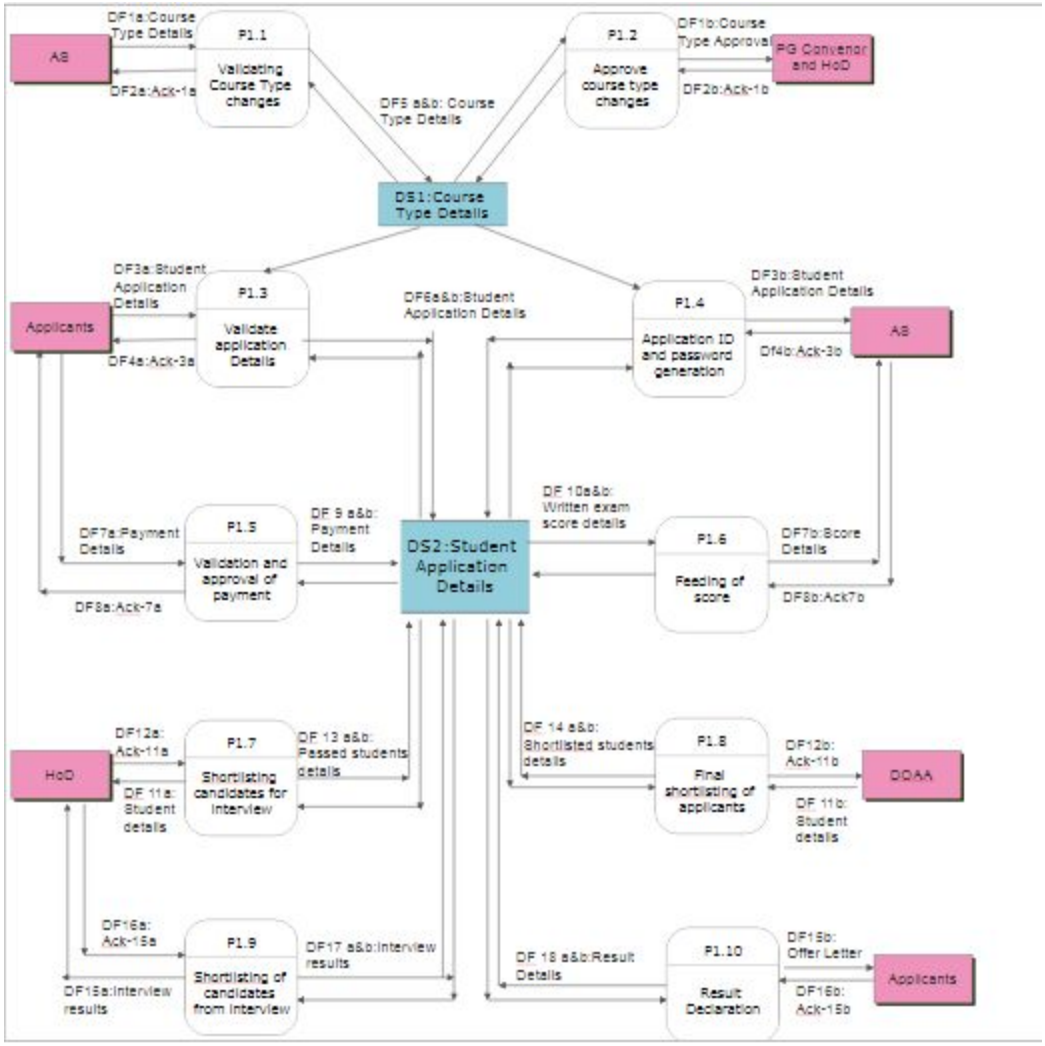
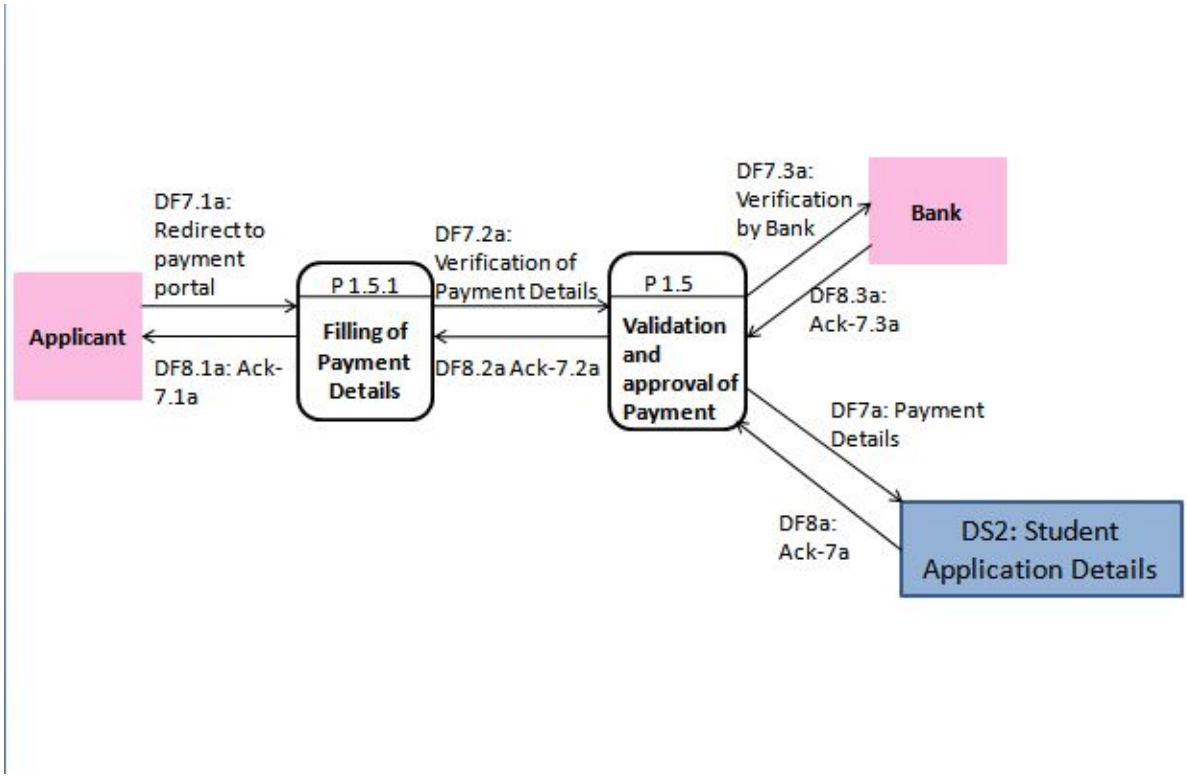
DFD level-0:


Administrative Staff
DF1: Course Type Details
DF2: Ack-1
DF5 a&b: Course Type Details
DS1:Course Type Details
P1
PG Admission Software Package
DF6 a&b: Student Application Details
DS2: Student Application Details
DF3:Student Application Details
Applicants
DF4: Ack-2
DF7: Review Application
DF8: Ack-3
PG Convenor
DF9:Review Shortlisted Applicants
DF10: Further Short-listing (Interview/ Written Exam)
DF12:Final short-listing of Applicants
DF11:Applicant Details
DOAA
Head of Departments

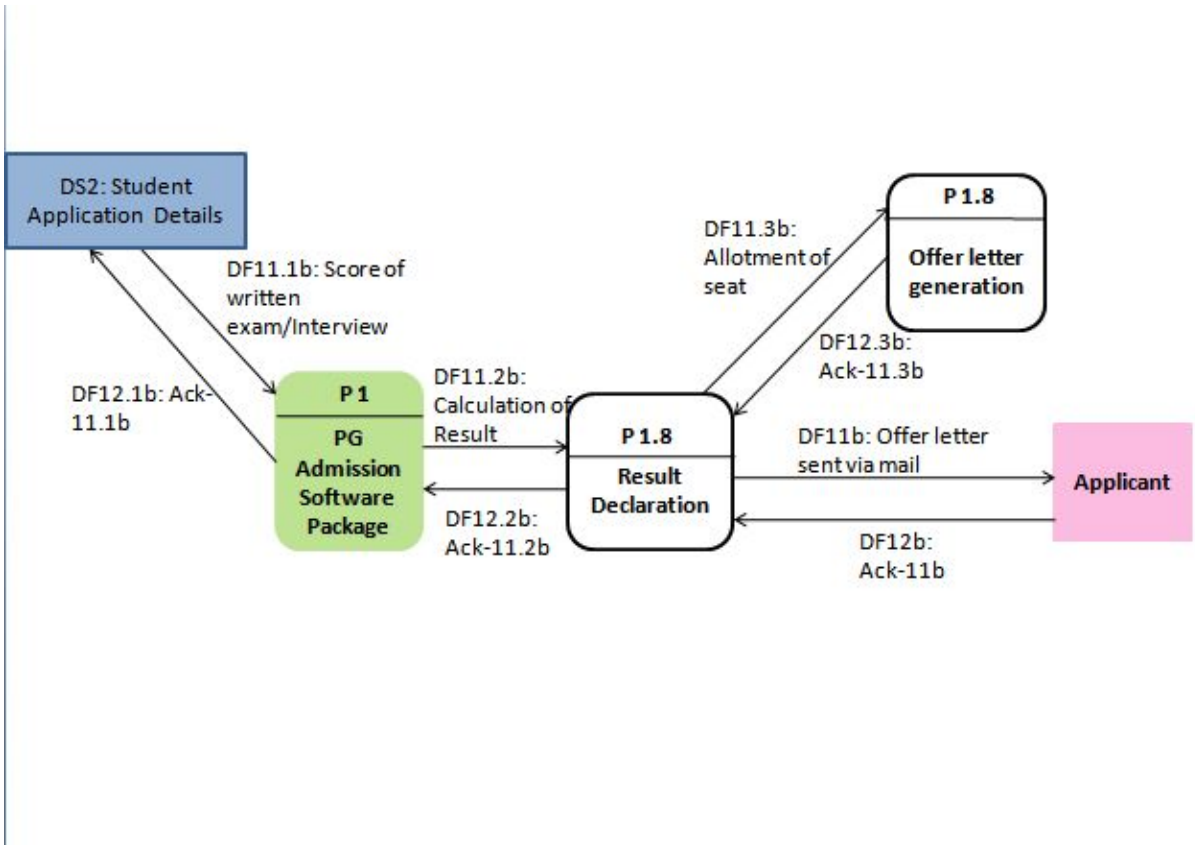
DFD level-1:


AS
DF1a:Course Type Details
P1.1
Validating Course Type changes
DF2a:Ack-1a
DF5 a&b: Course Type Details
P1.2
Approve course type changes
DF1b:Course Type Approval
PG Convenor and HoD
DF2b:Ack-1b
DS1:Course Type Details
Applicants
DF3a:Student Application Details
P1.3
Validate application Details
DF4a:Ack-3a
DF6a&b:Student Application Details
P1.4
Application ID and password generation
DF3b:Student Application Details
AS
Df4b:Ack-3b
DF7a:Payment Details
P1.5
Validation and approval of payment
DF8a:Ack-7a
DF 9 a&b: Payment Details
DS2:Student Application Details
DF 10a&b: Written exam score details
P1.6
Feeding of score
DF7b:Score Details
DF8b:Ack7b
HoD
DF12a: Ack-11a
P1.7
Shortlisting candidates for Interview
DF 11a: Student details
DF 13 a&b: Passed students details
DF 14 a&b: Shortlisted students details
P1.8
Final shortlisting of applicants
DF12b: Ack-11b
DOAA
DF 11b: Student details
DF16a: Ack-15a
P1.9
Shortlisting of candidates from Interview
DF15a:Interview results
DF17 a&b:Interview results
DF 18 a&b:Result Details
P1.10
Result Declaration
DF15b: Offer Letter
DF16b: Ack-15b
Applicants

DFD level-2(a):


Applicant
DF7.1a: Redirect to payment portal
DF8.1a: Ack-7.1a
P 1.5.1
Filling of Payment Details
DF7.2a: Verification of Payment Details
DF8.2a Ack-7.2a
P 1.5
Validation and approval of Payment
DF7.3a: Verification by Bank
DF8.3a: Ack-7.3a
Bank
DF7a: Payment Details
DF8a: Ack-7a
DS2: Student Application Details

DFD level-2(b):


DS2: Student Application Details
DF11.1b: Score of written exam/Interview
DF12.1b: Ack-11.1b
P 1
PG Admission Software Package
DF11.2b: Calculation of Result
DF12.2b: Ack-11.2b
P 1.8
Result Declaration
DF11.3b: Allotment of seat
DF12.3b: Ack-11.3b
P 1.8
Offer letter generation
DF11b: Offer letter sent via mail
DF12b: Ack-11b
Applicant

DATA STORE DESCRIPTION

Data Store	Data Item	Remarks
DS1: Course Type Details	1. Course Type Name 2. Course Description 3. Eligibility Rules 4. Faculty Incharge 5. Seats Available	
DS2: Student Application Details	1. Student Name 2. Student DOB 3. Parent's Name 4. Year of Graduation 5. Student's Address/email-id 6. Student's contact Details 7. Parent's contact Details 8. CGPA in 10th,Percentage of 12th 9. B.Tech CGPA 10. College of B.Tech Graduation 11. Important Documents 12. Course Type ID 13. Job Letter(if any) 14. Application ID/ Password 15. Payment Details 16. Exam/ Interview Details 17. Score Details 18. Result Details	

DATA FLOW DESCRIPTION

Data Flow	Data Item	Remarks
DF1 a: Course Type Details	1. Course Type Name 2. Course Description 3. Eligibility Rules 4. Faculty Incharge 5. Seats Available	
DF2 a: Ack-1a	1. Error Message OR 2. New Course Type Details as a Creation / changes Acknowledgement	
DF 1b: Course Type Approval	1. Course Type ID 2. Name of Approving Authority 3. Date and Time of Approval	
DF 2b: Ack-1b	1. Acknowledgement message that “Course Type ID” is approved and changes are implemented	
DF 3a: Student DF 6a&b: Application DF 3b: Details	1. Student Name 2. Student DOB 3. Parent’s Name 4. Year of Graduation 5. Student’s Address/email-id 6. Student’s contact Details 7. Parent’s contact Details 8. CGPA in 10th,Percentage of 12th 9. B.Tech CGPA 10. College of B.Tech Graduation 11. Important Documents 12. Course Type ID 13. Job Letter(if any) 14. Application ID/ Password 15. Payment Details 16. Exam/ Interview Details 17. Score Details 18. Result Details 19. GATE score(in case of PhD)	
DF 4a: Ack-3a	1. Error Message if any of the field in not valid (eg- phone number,email,documents,etc)	

	2. Acknowledgement of Successful submission of details	
DF 4b: Ack-3b	1. Error Message OR 2. Sending Application ID and Password on Applicants mail.	
DF8.1 a: Ack- 7.1a DF8.2 a: Ack- 7.2a DF8.3 a: Ack- 7.3a	1. Transaction successful/ Error in Transaction 2. Problem in Transaction (in case of Error)	
DF7.2 a: Verification of Payment Details	1. Account No. 2. Bank Name and Branch 3. Credit/Debit Card No. 4. CVV No. 5. Type of user 6. OTP No.	
DF7.3 a: Verification by Bank	1. Account No. 2. Bank Name and Branch 3. Credit/Debit Card No. 4. Balance 5. CVV No. 6. Type of user 7. OTP No.	
DF7a: Payment Detail DF9a & b: Payment Details	1. Account No. 2. Bank Name and Branch 3. Credit Card/Debit No. 4. Acknowledgement of Payment successful or not	
DF8 a: Ack- 7a	1. Acknowledgement: Payment details saved OR 2. Enter correct details again(in case of error)	
DF10a&b: Written Exam Details	1. Course ID 2. Written Exam Date 3. Score 4. Admit Card	
DF7b: Score Details	1. Course ID 2. GATE qualified or not(in case of M.Tech) 3. GATE score(if qualified) 4. Written Exam Score	

DF8b:Ack7b	1. Acknowledgement: Score Feeded Successfully OR 2. Re-Enter the Score	
DF12-17a&b	1. Applicant ID 2. Course ID 3. Written Exam Score 4. Interview Score 5. Admit Card 6. Interview Date	
DF18a&b: Result Details	1. Pass OR Fail 2. Course ID 3. Date of Joining 4. Offer Letter	
DF11.2b: Calculated Result	1. Pass OR Fail	
DF11b: Offer Letter Details	1. Offer Letter 2. Date of Joining	
DF12b: Ack-11b	1. Acknowledgement message of Error in sending mail OR 2. Mail successfully sent	
DF12.2b: Ack-11.2b DF12.1b: Ack-11.1b	1. Error Message OR 2. Notification of Result (Pass or Fail) 3. Offer Letter(in case of Pass)	

UNIT LEVEL PROCESS DESCRIPTION

Process ID	Process Name	DF-In	DF-Out	Description
P 1.1	Validating Course Type Changes	DF-1a	DF-2a	1. Administrative Staff can (a) create a new course type or (b) modify /or (c) delete an existing course type; 2. They do so by accessing this software, choosing the options (a) or (b) or (c) and filling-in the Course Type Details; 3. The process P 1.1 will validate each field of the Course Type Details (creation or changes) and if there are any errors, it will display the same to the Administrative Staff; 4. The AS will then correct the errors and re-submits the details 5. If there are no errors, the process P1.1 will write the details onto the Data Store, DS1.
P 1.2	Approve Course Type Changes	DF-2b	DF-1b	1. The PG Conveyor and the DOAA will check all the details of any amendments made or any new course introduced. 2. Through the process P 1.2, the concerned authorities will approve or reject the proposal and the acknowledgement of decision will be passed to the AS. 3. The changes will be reflected to the data store DS1.

P 1.3	Validate Application Details	DF-3a	DF-4a	1. Applicants will fill in the application form details which includes (a) Personal Details (b)Academic Details and (c)Uploading the Relevant Documents 2. They do so by accessing this software, choosing the Course Type - PhD,MSc,MTech; 3. The process P 1.3 will validate each field of the Application Details (creation or changes) and if there are any errors, it will display the same to the Applicant; 4. The Applicant will then correct the errors and re-submits the details 5. If there are no errors, the process P1.3 will write the details onto the Data Store, DS2.
P 1.4	Application ID and Password generation	DF-4b	DF-3b	1. The student details after being validated are sent to the AS for further processing. 2. This is done by clicking on the option "Submit details". 3. The details are then cross verified by the AS and process P 1.4 generates an application ID and password for the applicant. 4. The software package will make the generated ID and password on the email-id of each applicant and store the details in Date Store, DS2.
P 1.5.1	Filling Of Payment Details	DF-7.1a & DF-8.2a	DF-8.1a & DF-7.2a	1. Applicant will click on the option "Proceed To Payment " and will select any of the available payment options on the payment portal. 2. Applicant will then fill the required fields and click on

				"Generate OTP" for the verification 3. The process P 1.5.1 will submit the details to the respective Bank and if there are any errors, it will display the same to the Applicant; 4. The Applicant will then correct the errors and re-submits the details.
P 1.5	Validation and approval of Payment	DF-7.2a & DF-8.3a	DF-8.2a & DF-7.3a	1. The details filled by the applicant are then forwarded to the bank for verification. 2. The bank sends an OTP if all the details entered are correct. 3. The user is authenticated through the OTP and the payment is made. 4. The bank sends an acknowledgement of transaction receipt which is forwarded by the Software package to the email id of the applicant for future reference. 5. The payment details are then stored in the Data Store DS2.
P 1.6	Feeding of Score	DF-10a & DF-8b	DF-10b & DF-7b	1. The Administrative Staff passes the score of each applicant to the Software package. 2. This is done by clicking on the Option "Enter Score". 3. The score is then stored in the Data Store DS2 and an acknowledgement is then sent to the AS. 4. In case of any error, the Software package displays the error, and the AS correct and re-submit the score details.
P 1.7	Shortlisting Candidates for Interview	DF-12a& DF-13a	DF-11a& DF-13b	1. The course ID and the GATE score(in case of M.Tech and GATE qualified) and written exam score. 2. The data is then passed to the HoD/DOAA which shortlist candidates for the Interview. 3. This is done by the clicking on the

P 1.8	Final Shortlisting of applicants	DF-14a& DF-11b	DF-14b& DF-12b	option “Shortlist for Interview”. 4. The software package then uploads the status on the applicant’s portal and generates the admit card which is sent to the applicant’s email ID. 5. The interview dates are then stored in the Data Store DS2.
P 1.9	Shortlisting of candidates from Interview	DF-16a& DF17b	DF-15a& DF-17a	1. The course ID and the Interview score. 2. The data is then passed to the HoD for shortlisting selected Students. 3. This is done by the clicking on the option “Shortlist Selected Students”. 4. The software package then uploads the status on the applicant’s portal. 5. The interview dates are then stored in the Data Store DS2.
P 1.10	Result Declaration	DF-18a& DF-16b	DF-18b& DF-15b	1. The Software Package will fetch the score details of each applicant and calculate the result according to the seats available. 2. In case if seat is alloted, it passes the Applicant details and the course Id to the process P 1.8.1. 3. The process P 1.8 updates the status of the result on the application portal of the applicants, mail the Offer letter(if any) to the student, and stores the result in Data Store DS2.
P 1.8.1	Offer Letter generation	DF-11.3b	DF-12.3b	1. Result of each applicant along with course Id, and the applicant’s details are passed to the process P1.8.1. 2. In case of seat allotment, the process generates the Offer Letter and passes it to process P1.8. 3. In case of any discrepancies in the information entered, it generates an error message. 4. In such case, the changes are made, and the details are passed again.