

# GUJARAT TECHNOLOGICAL UNIVERSITY

Chandkheda, Ahmedabad

Affiliated



Institute  
Logo  
Here

(Name of Institute)

A Report On-

**(TOPIC)**

Under subject of  
**DESIGN ENGINEERING – 1A**  
B. E. II, Semester – III  
(XXXXXX Branch)

Submitted by:  
Group:

Sr.	Name of student	Enrolment No.
1.		
2.		
3.		
4.		

CCCC DDDD EEEE  
(Faculty Guide)

AAAA BBBB CCCC  
Head of the Department

Academic year  
(2015-2016)

### Common Instructions:

- 1) There is no need to repeat / rewrite these instructions in your report document
- 2) All questions are to be attempted to best describe your thinking approaches.
- 3) Questions may be answered in paragraph form. Avoid bullet unless to mention very specifically something.
- 4) There is no page limit/ word limit for the answer, may be you can put in brief/ detail to best of your discretion. Your choice obviously.
- 5) You can also use pictures (in part or full size) of your canvas. Kindly make sure you reduce the using compression (Format tab at top) with a resolution of 200 dpi. Teams can add picture of any part of canvases to explain particular thing in the report.
- 6) Sections are illustrative here. Students and faculty guide may decide their best way to express the THINKING APPROACH in report.
- 7) At the end of the report each team is supposed to add the full image of each canvas.
- 8) The report book can be spiral bound and team can keep one copy with them and they can give a copy to the department for record.
- 9) GTU will provide a web link where each team in each branch can register and upload the soft copy of the report including image of each canvas, if the portal will be ready by the time of examination. Else Examiner shall mail best 3 project reports to [design@gtu.edu.in](mailto:design@gtu.edu.in)
- 10) Teams will have to show the physical canvases, other frameworks and logbooks to the department/examiner during the practical examination and explain briefly.
- 11) After examination students team has to keep record of all the canvases, other frameworks and logbooks for their further reference or submit to the department. They need to safeguard all the canvases, other frameworks and logbooks for future references.

## Contents:

**Note: Content may vary as case to case basis.**

1. Introduction (Briefly describes below mentioned aspects)
  - a) What is Design Thinking? Your understanding
  - b) Its importance, Socio-economical relevance
  - c) Learning Tools and its importance
  - d) Team building and Log book exercises and importance
  
2. Empathy Mapping
  - a) Observation through AEIOU and other methods
  - b) Role Playing
  - c) Interview techniques
  - d) Mind Mapping (Data analysis)
  - d) AEIOU Summary framework
  - e) Empathy Mapping Canvas
  
3. Secondary Research & Diachronic and Synchronic Analysis towards problem definition
  
4. Ideation Canvas
  
5. Product Development Canvas

## **1. Introduction**

Give a name to your team. Write in brief about every team members, guide, and mentors with their photos if possible. Elaborate what you know about design thinking (50 words). Importance and socio-economic relevance of Design Thinking. Also describe all learning tools and any assignments you have done for the same. Importance of Team building and log book exercises. You can study, analyse and share in your own words. Mention the process or journey you gone through during semester for preparing your report.

## **2. Empathy Mapping**

- 1) Describes about the domain/area of interest, you have selected for the observation.
- 2) Mentioned all observation data through AEIOU, role playing, interviews techniques etc. with the help of notes, photographs and videos.
- 3) Describes about mind mapping techniques and what broad groups and sub-groups you have selected to further categorize your observation data? (put your mind map snapshot)
- 4) AEIOU summary (Snapshot of the same is required as whole or in part)
- 5) Who was the Selected User in Empathy canvas? Who were the stakeholders? (snapshot of user and stakeholder section from the canvas)
- 6) Enlist all the activities of the user mentioned in the canvas and write briefly about all of them. (snapshot of activities section in the canvas)
- 7) Mention the stories mentioned in the canvas in 100 words each.
- 8) Insert a picture of entire mind map, AEIOU summary and empathy mapping canvas.
- 9) Write 5 points about your conclusion from the empathy canvas. And broadly identify the problems after observation and empathy phase.

## **3. Secondary Research & Diachronic and Synchronic Analysis**

- 1) Give the summary of your secondary research after the observation phase based upon which you will outline the project work
- 2) Describe about Diachronic Analysis for the product/process/system you observed
- 3) Describe about Synchronic Analysis for the product/process/system you observed

#### **4. Ideation Canvas**

- 1) Mention the set of People in ideation canvas. (You may mention about new persons introduced in addition to Empathy canvas) (with snapshot of the section)
- 2) List down every single activity mentioned in the canvas people-wise. (with snapshot of the section)
- 3) List down variations for all the activities based on situation, contexts and locations in the canvas within domain and also outside domain. Explain each of them in brief. (with snapshot)
- 4) Mention all the random (relevant and irrelevant to your domain both) props/tools/techniques/equipment's (all non-living things) included in your canvas and highlight the props you actually used in the problem identification.
- 5) Explain in 250 words various iterations tried with the ideation canvas. Mention at least 20 iterations and explain all of them. List down at least 10 problems you figured out while analysing the ideation canvas.
- 6) Insert a picture of entire canvas of ideation.

#### **5. Product Development Canvas**

- 1) After combining and refinement in the Ideation process, describe final problem statement for your project.
- 2) Mention with snapshots of all the sections of the product development canvas and explain all of them in detail.
- 3) Write in about 100 words about your product solution with its functions, features and components.
- 4) Explain the customer revalidation and the reject, retain and redesign components in detail.
- 5) Mention the redesigned features and components in detail.