

# Ideation Phase

## Brainstorm & Idea Prioritization Template

Date	
Team ID	
Project Name	Visualizing Housing Market Trends: An Analysis of Sale Prices and Features Using Tableau
Maximum Marks	4 Marks

### Step-1: Team Gathering, Collaboration and Select the Problem Statement

Before you collaborate

Gather your team and set the stage for a productive brainstorm.

Focus on: What visual features help housing buyers decide?

Time: 15 minutes per step

Define your problem statement

How might we help home buyers and real estate agents explore Ames, Iowa housing market data visually so they can make informed, data-driven property decisions?

Team gathering & Problem selected by consensus

Problem Selected	Visual Approach	Skills Needed	Next Action Items
Price trend analysis	Afford interactive maps	Scatter plot vs price	Dashboard design needed
Neighborhood comparisons	Bar/box charts per quality	Forecast line chart	Filter panel for user
Feature correlation	Heatmap beds x baths	KPI cards for metrics	Story board design

Problem Statement Selected:

\*Home buyers, real estate agents, and urban planners need an interactive visual tool to explore the Ames, Iowa housing dataset (1,460 properties) because the raw CSV format makes it difficult to compare neighborhoods, analyse price trends, and make informed property purchase decisions.\*

# Step-2: Brainstorm, Idea Listing and Grouping

Step-2: Brainstorm, Idea Listing and Grouping

Write down all ideas on sticky notes. Then group similar ideas into themes.

Price heatmap by neighborhood

Scatter: area vs sale price

Filter by bedroom count

Bar chart: overall quality

Forecast line chart by year

Box plot: price outliers

KPI card: avg price

Map: price by zip code

Pie chart: property types

Filter by price band

Year built trend chart

Correlation: garage vs price

Group 1: Visualization Ideas

Tree map for country/region

Pie charts for categories

Map by price & location

Interactive dashboard

Group 2: Analysis Goals

Neighbourhood price trends

Feature-price correlation

Forecast future prices

Group 3: Dashboard Features

Add filter by quality (1-10)

Price band filter

KPI summary cards

Export/share charts

After brainstorming, we clustered sticky notes into 3 main themes:

Visualization Ideas

How to represent housing data: heatmaps, scatter plots, bar charts, forecast lines

Analysis Goals

Insights: neighbourhood comparisons, feature-price correlation, year-over-year trends

Dashboard Features

Interactivity: filters (price band, bedroom, quality), KPI cards, export capability

These groupings guided the next step of idea prioritization.

# Step-3: Idea Prioritization

Step-3: Idea Prioritization (Importance vs Feasibility)

Importance

+

-

-

+

Feasibility

Pie chart types

Box plot outliers

Map by location

Forecast line chart

KPI cards avg price

Scatter area vs sale price

Filter by price band

Price heatmap

Bar quality rating

Key:  $\square$  = Priority Feature

$\square$  Price heatmap by neighborhood

$\square$  Scatter: area vs sale price

$\square$  Bar chart overall quality rating

These are high importance + high feasibility features to build first