Zooniverse Project

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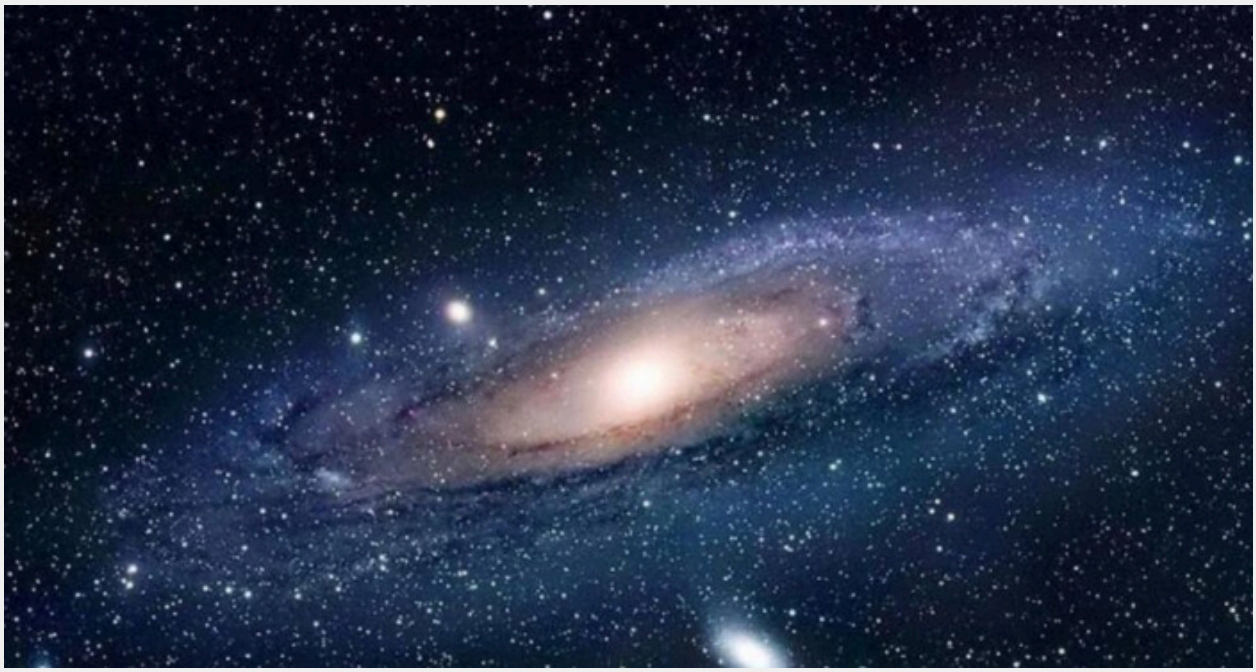
PRIMER UDS2 V8

The project has since been updated and renamed Cosmic Collisions, with a new focus on black hole properties.

The project involved classifying images of galaxies to identify morphological types (Disk, Spheroid, Irregular, Point Source) and other features such as clumps, spirals, and interactions. Each image was assessed for the main type, secondary type, feature presence, and its undergoing interactions. A total of 100 images were classified.

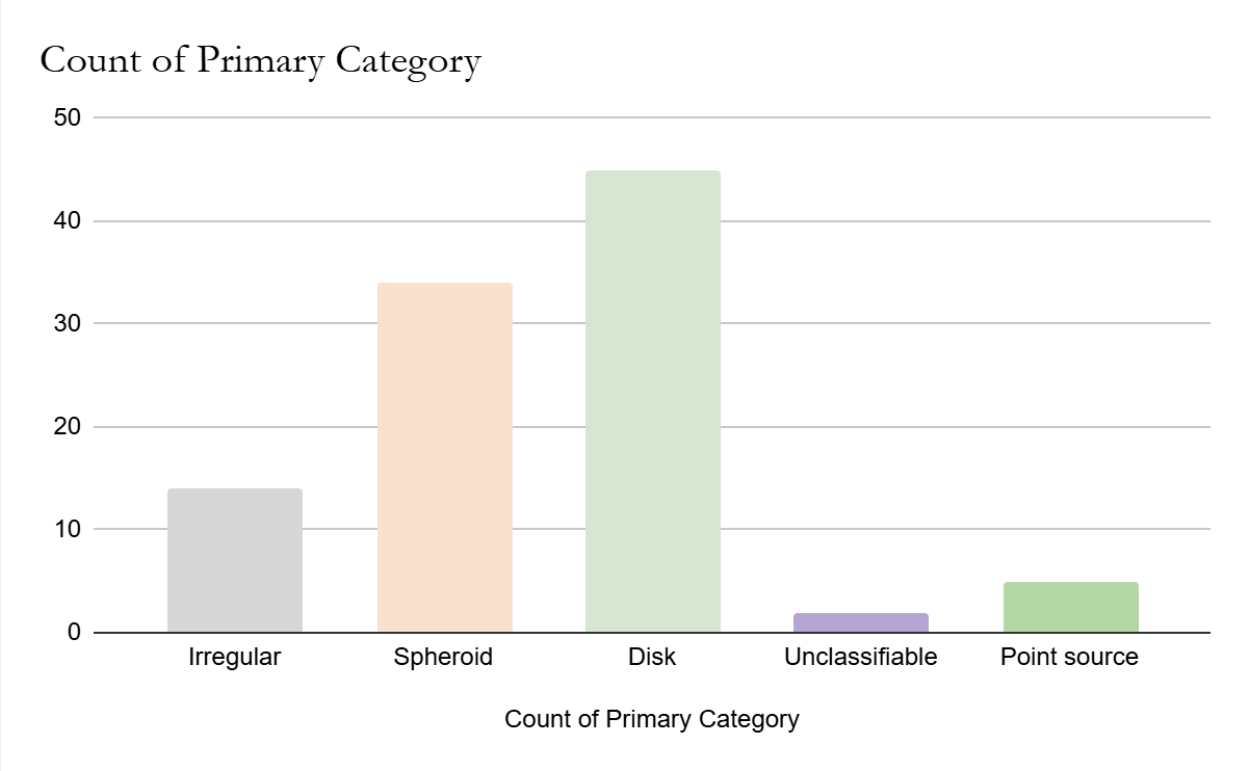


Methods:

Observations were recorded in Google Sheets, tracking images with care. Charts generated to summarize classifications. The following classifications were performed for the project originally titled PRIMER UDS4 VB, which focused on galaxy morphology.

Due to the description being changed, this document has a lack of source to gather explanation about the prior project.

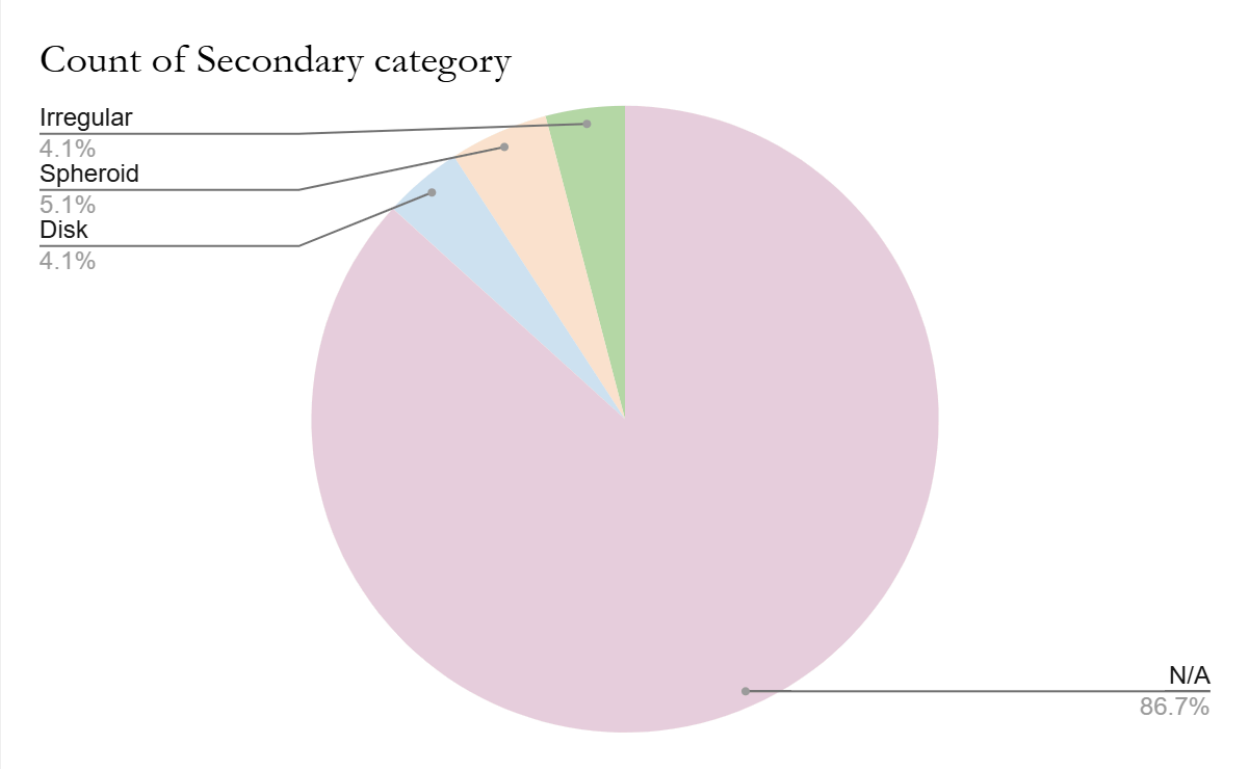
Table 1. Main Type Distribution



Distribution of main galaxy types across the 100 classified images, showing the relative frequencies of Disk, Spheroid, Irregular, Point Source, and Unclassifiable galaxies.

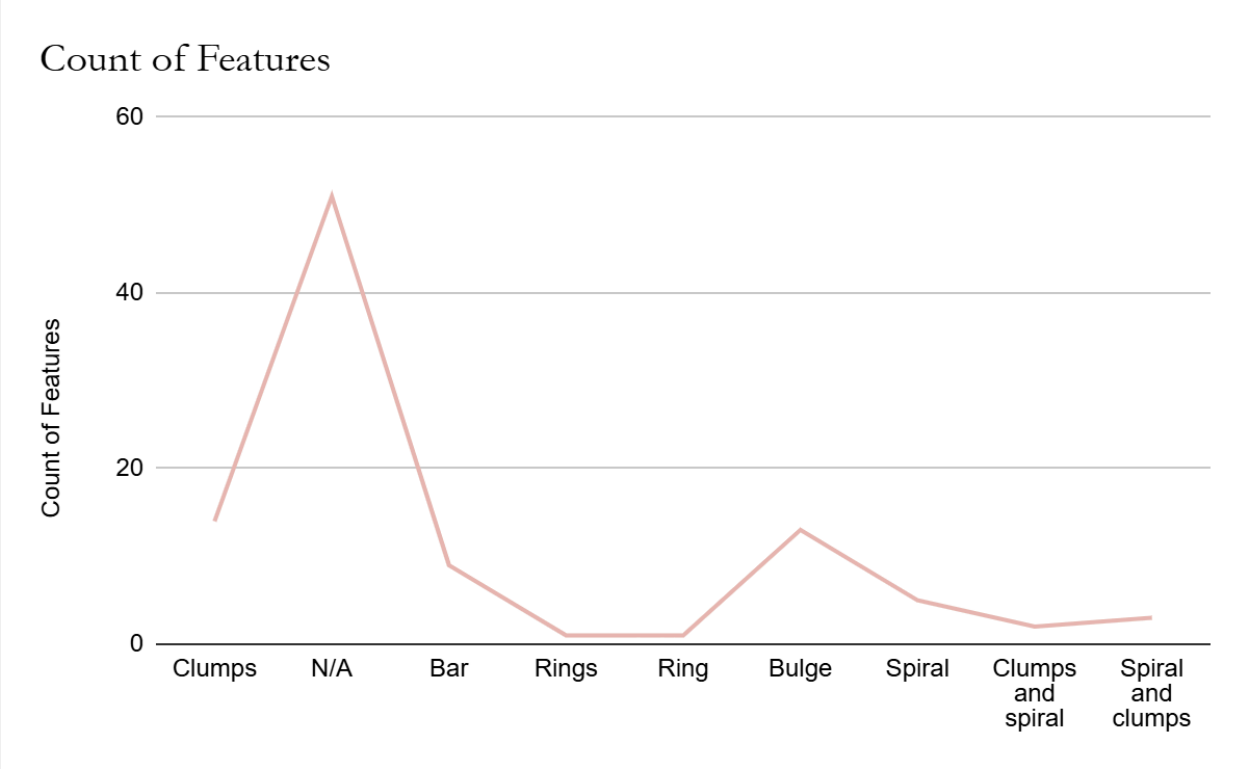
Observations revealed that the primary category of most of the galaxies/images was disk, spheroid being second. Some galaxies were unclassifiable due to too zooned in, part of a galaxy, noisy or blurry.

Table 2. Secondary Type Distribution



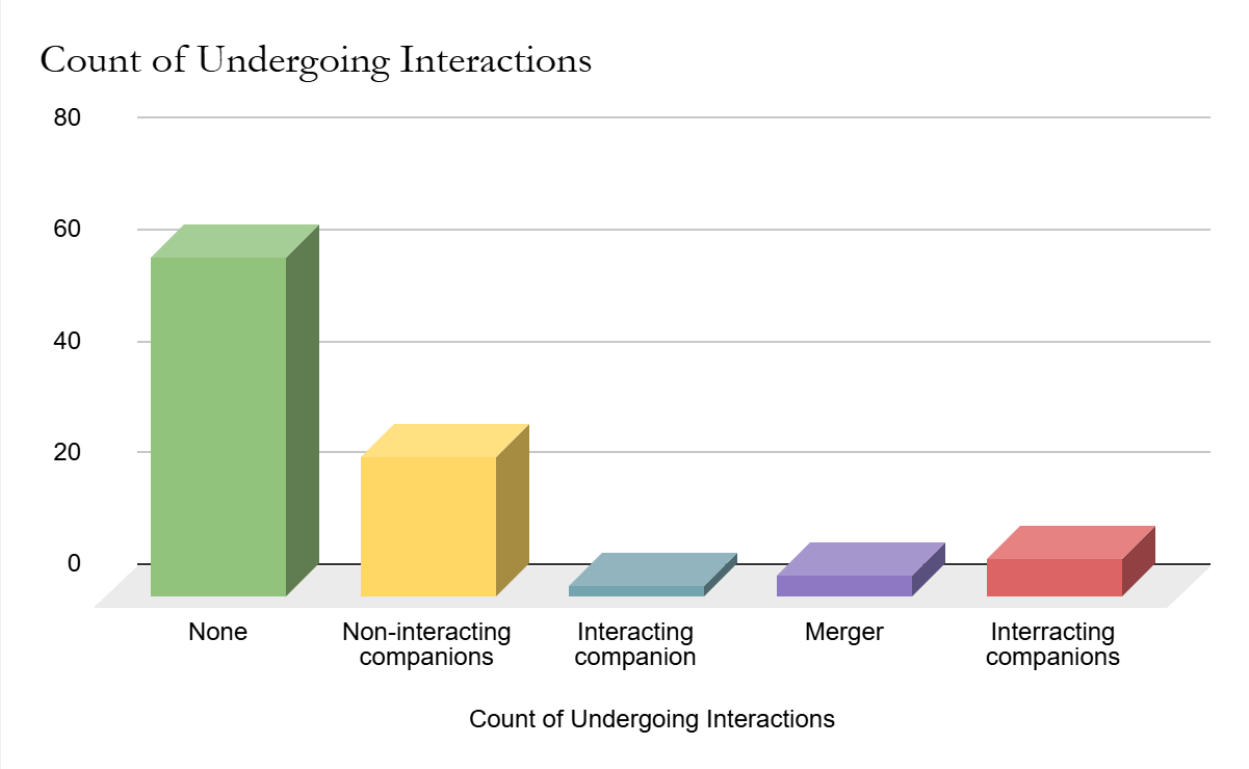
Summary of secondary galaxy types assigned when the main type was ambiguous or when galaxies exhibited mixed morphology. (N/A— Not applicable/ Not available.)

Table 3. Features Distribution



Counts of observed galaxy features such as clumps, bulge, spiral, and other notable structures across the dataset.

Table 4. Distribution of Undergoind Interactions



Counts of observed galaxy features such as clumps, tidal tails, dust lanes, and other notable structures across the dataset.

Conclusion:

The classifications of 100 galaxy images provided insights into the distribution of main and secondary galaxy types, along with the frequency of notable features and evidence of

interactions or mergers. While some images were ambiguous due to quality or overlapping structures, the dataset still reflects meaningful patterns that can support broader research. Although the project has since shifted its focus to black holes, these galaxy morphology classifications remain a valid and valuable contribution to the earlier phase of the project.