Capstone Overview :-

Steps Involved :-

Env setup → Github, Git

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Data loading → Source files

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Data preprocessing → Batch processing
- → Stuffing
- → Img Transformation
  - Reshaping
  - resizing

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Model Building →
- Normalization (Mean, Std dev, Var)
- Down sampling
- Upsampling.
- Generator (Unet) → layer building
- Discriminator → layer building
  - → Activation fn.

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Model Training → loss Calc: (BCE)
- Discriminator loss fn
- Generator loss fn

Cycle loss fn

Identity loss fn

optimizer. fn

Checkpoint Init for restoring

Training → Epoch processing.

- → Generator
- → discriminator.
- → loss calc.
- → Backpropagation.
- → optimizer.
- → Generate Images.

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Model Visualization. → GIF Generation.

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Export Model → .pkl file.

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(additional).

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Create User Interface (UI)

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Create API Calls.

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Package it as a Docker Image.

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Publish it in github

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Deploy in cloud. (Azure, aws, GCP)