

Final Output: API Endpoint Details for Testing

The final project includes two key deployment modes to access the email classification and PII masking functionality: a local Flask API and a cloud-based Gradio interface deployed on Hugging Face Spaces.

Flask API Endpoint (Local Testing) :

- URL: `http://127.0.0.1:5000/classify`
- Method: POST
- Request Input Format (JSON):

```
{  
  "email_text": "string containing the email"  
}
```

- Response Output Format (JSON):

```
{  
  "input_email_body": "original email text",  
  "list_of_masked_entities": [  
    {  
      "position": [start_index, end_index],  
      "classification": "entity_type",  
      "entity": "original_entity_value"  
    }  
  ],  
  "masked_email": "masked email text",  
  "category_of_the_email": "classified category"  
}
```

The local Flask API allows for fast and flexible offline testing and integration into internal systems.

Hugging Face Spaces Deployment (Gradio UI) :

- URL: <https://huggingface.co/spaces/vinay2001/Email-Classification>

Both interfaces adhere to strict API response format requirements, ensuring consistency across environments.