

Appendix: Sample Data for AI Agent Intern Assignment

I. Initial Testing Data (Force Learning)

File 1: invoices_extracted.json (Initial)

```
[  
  {  
    "invoiceld": "INV-A-001",  
    "vendor": "Supplier GmbH",  
    "fields": {  
      "invoiceNumber": "INV-2024-001",  
      "invoiceDate": "12.01.2024",  
      "serviceDate": null,  
      "currency": "EUR",  
      "netTotal": 2500.0,  
      "taxRate": 0.19,  
      "taxTotal": 475.0,  
      "grossTotal": 2975.0,  
      "lineItems": [{ "sku": "WIDGET-001", "qty": 100, "unitPrice": 25.0 }]  
    },  
    "confidence": 0.78,  
    "rawText": "Rechnungsnr: INV-2024-001\nLeistungsdatum: 01.01.2024"  
  },  
  {  
    "invoiceld": "INV-A-002",  
    "vendor": "Supplier GmbH",  
    "fields": {
```

```
"invoiceNumber": "INV-2024-002",
"invoiceDate": "18.01.2024",
"serviceDate": null,
"currency": "EUR",
"netTotal": 1000.0,
"taxRate": 0.19,
"taxTotal": 190.0,
"grossTotal": 1190.0,
"lineItems": [{"sku": "WIDGET-001", "qty": 40, "unitPrice": 25.0}],
},
"confidence": 0.82,
"rawText": "Rechnungsnr: INV-2024-002\nLeistungsdatum: 15.01.2024"
},
{
"invoiceld": "INV-B-001",
"vendor": "Parts AG",
"fields": {
"invoiceNumber": "PA-7781",
"invoiceDate": "05-02-2024",
"currency": "EUR",
"netTotal": 2000.0,
"taxRate": 0.19,
"taxTotal": 400.0,
"grossTotal": 2400.0,
"lineItems": [{"sku": "BOLT-99", "qty": 200, "unitPrice": 10.0}]
},
}]]
```

"confidence": 0.74,
"rawText": "VAT already included in total"
},
{
"invoiceld": "INV-B-002",
"vendor": "Parts AG",
"fields": {
"invoiceNumber": "PA-7799",
"invoiceDate": "20-02-2024",
"currency": "EUR",
"netTotal": 1500.0,
"taxRate": 0.19,
"taxTotal": 285.0,
"grossTotal": 1785.0,
"lineItems": [{"sku": "BOLT-99", "qty": 150, "unitPrice": 10.0}]
},
"confidence": 0.86,
"rawText": "Prices incl. VAT"
},
{
"invoiceld": "INV-C-001",
"vendor": "Freight & Co",
"fields": {
"invoiceNumber": "FC-1001",
"invoiceDate": "01.03.2024",
"currency": "EUR",

```
"netTotal": 980.0,  
"taxRate": 0.19,  
"taxTotal": 186.2,  
"grossTotal": 1166.2,  
"lineItems": [{ "description": "Transport charges", "qty": 1, "unitPrice": 1000.0 }]  
},  
"confidence": 0.79,  
"rawText": "2% Skonto if paid within 10 days"  
}  
]
```

File 2: reference_data.json

```
{  
  "purchaseOrders": [  
    {  
      "poNumber": "PO-A-050",  
      "vendor": "Supplier GmbH",  
      "date": "2024-01-05",  
      "lineItems": [{ "sku": "WIDGET-001", "qty": 100, "unitPrice": 25.0 }]  
    },  
    {  
      "dnNumber": "DN-A-123",  
      "vendor": "Supplier GmbH",  
      "poNumber": "PO-A-050",  
      "date": "2024-01-05",  
      "lineItems": [{ "sku": "WIDGET-001", "qty": 100, "unitPrice": 25.0 }]  
    }  
  ],  
  "deliveryNotes": [  
    {  
      "dnNumber": "DN-A-123",  
      "vendor": "Supplier GmbH",  
      "poNumber": "PO-A-050",  
      "date": "2024-01-05",  
      "lineItems": [{ "sku": "WIDGET-001", "qty": 100, "unitPrice": 25.0 }]  
    }  
  ]  
}
```

```
        "lineItems": [ { "sku": "WIDGET-001", "qtyDelivered": 95 } ] }
```

File 3: human_corrections.json (Initial)

```
[  
 {  
   "invoiceld": "INV-A-001",  
   "vendor": "Supplier GmbH",  
   "corrections": [  
     {  
       "field": "serviceDate",  
       "from": null,  
       "to": "2024-01-01",  
       "reason": "Leistungsdatum found in raw text"  
     }  
   ],  
   "finalDecision": "approved"  
 },  
 {  
   "invoiceld": "INV-B-001",  
   "vendor": "Parts AG",  
   "corrections": [  
     {  
       "field": "taxTotal",  
       "from": 400.0,  
       "to": 450.0,  
       "reason": "Tax amount increased by 12.5%"  
     }  
   ],  
   "finalDecision": "denied"  
 }]
```

```
        "to": 380.0,  
        "reason": "VAT included in total; recalculated"  
    }  
],  
    "finalDecision": "approved"  
}  
]
```

II. Full Sample Dataset (12 Invoices)

1. Full invoices_extracted.json

```
[  
  {  
    "invoiceld": "INV-A-001",  
    "vendor": "Supplier GmbH",  
    "fields": {  
      "invoiceNumber": "INV-2024-001",  
      "invoiceDate": "12.01.2024",  
      "serviceDate": null,  
      "currency": "EUR",  
      "poNumber": "PO-A-050",  
      "netTotal": 2500.0,  
      "taxRate": 0.19,  
      "taxTotal": 475.0,  
      "grossTotal": 2975.0,  
      "lineItems": [  
        { "sku": "WIDGET-001", "description": "Widget", "qty": 100, "unitPrice": 25.0 }  
      ]  
    }  
  }  
]
```

```
},
"confidence": 0.78,
"rawText": "Rechnungsnr: INV-2024-001\nLeistungsdatum: 01.01.2024\nBestellnr: PO-A-050\nn..."
},
{
"invoiceld": "INV-A-002",
"vendor": "Supplier GmbH",
"fields": {
"invoiceNumber": "INV-2024-002",
"invoiceDate": "18.01.2024",
"serviceDate": null,
"currency": "EUR",
"poNumber": "PO-A-050",
"netTotal": 2375.0,
"taxRate": 0.19,
"taxTotal": 451.25,
"grossTotal": 2826.25,
"lineItems": [
{ "sku": "WIDGET-001", "description": "Widget", "qty": 95, "unitPrice": 25.0 }
]
},
"confidence": 0.72,
"rawText": "Rechnungsnr: INV-2024-002\nLeistungsdatum: 15.01.2024\nBestellnr: PO-A-050\nnHinweis: Teillieferung\nn..."
},
```

```
{  
    "invoiceld": "INV-A-003",  
    "vendor": "Supplier GmbH",  
    "fields": {  
        "invoiceNumber": "INV-2024-003",  
        "invoiceDate": "25.01.2024",  
        "serviceDate": null,  
        "currency": "EUR",  
        "poNumber": null,  
        "netTotal": 500.0,  
        "taxRate": 0.19,  
        "taxTotal": 95.0,  
        "grossTotal": 595.0,  
        "lineItems": [  
            { "sku": "WIDGET-002", "description": "Widget Pro", "qty": 20, "unitPrice": 25.0 }  
        ]  
    },  
    "confidence": 0.69,  
    "rawText": "Rechnungsnr: INV-2024-003\nLeistungsdatum: 20.01.2024\nBestellung:  
(keine Angabe)\nReferenz: Lieferung Januar\n..."  
},  
{  
    "invoiceld": "INV-A-004",  
    "vendor": "Supplier GmbH",  
    "fields": {  

```

```
"invoiceDate": "26.01.2024",
"serviceDate": null,
"currency": "EUR",
"poNumber": null,
"netTotal": 500.0,
"taxRate": 0.19,
"taxTotal": 95.0,
"grossTotal": 595.0,
"lineItems": [
  { "sku": "WIDGET-002", "description": "Widget Pro", "qty": 20, "unitPrice": 25.0 }
]
},
"confidence": 0.63,
"rawText": "Rechnungsnr: INV-2024-003\nLeistungsdatum: 20.01.2024\nHinweis: erneute Zusendung\n..."
},
{
"invoiceld": "INV-B-001",
"vendor": "Parts AG",
"fields": {
  "invoiceNumber": "PA-7781",
  "invoiceDate": "05-02-2024",
  "currency": "EUR",
  "poNumber": "PO-B-110",
  "netTotal": 2000.0,
  "taxRate": 0.19,
```

```
"taxTotal": 400.0,  
"grossTotal": 2400.0,  
"lineItems": [  
  { "sku": "BOLT-99", "description": "Bolts", "qty": 200, "unitPrice": 10.0 }  
]  
,  
"confidence": 0.74,  
"rawText": "Invoice No: PA-7781\nPO: PO-B-110\nPrices incl. VAT (MwSt. inkl.)\nTotal:  
2380.00 EUR\n..."  
,  
{  
  "invoiceId": "INV-B-002",  
  "vendor": "Parts AG",  
  "fields": {  
    "invoiceNumber": "PA-7799",  
    "invoiceDate": "20-02-2024",  
    "currency": "EUR",  
    "poNumber": "PO-B-110",  
    "netTotal": 1500.0,  
    "taxRate": 0.19,  
    "taxTotal": 285.0,  
    "grossTotal": 1785.0,  
    "lineItems": [  
      { "sku": "BOLT-99", "description": "Bolts", "qty": 150, "unitPrice": 10.0 }  
    ]  
  },  
}
```

"confidence": 0.86,
"rawText": "Invoice No: PA-7799\nPO: PO-B-110\nMwSt. inkl.\n..."
},
{
"invoiceld": "INV-B-003",
"vendor": "Parts AG",
"fields": {
"invoiceNumber": "PA-7810",
"invoiceDate": "03-03-2024",
"currency": null,
"poNumber": "PO-B-111",
"netTotal": 1000.0,
"taxRate": 0.19,
"taxTotal": 190.0,
"grossTotal": 1190.0,
"lineItems": [
{ "sku": "NUT-10", "description": "Nuts", "qty": 500, "unitPrice": 2.0 }
]
},
"confidence": 0.66,
"rawText": "Invoice No: PA-7810\nPO: PO-B-111\nCurrency: EUR\n..."
},
{
"invoiceld": "INV-B-004",
"vendor": "Parts AG",
"fields": {

```
"invoiceNumber": "PA-7810",
"invoiceDate": "04-03-2024",
"currency": "EUR",
"poNumber": "PO-B-111",
"netTotal": 1000.0,
"taxRate": 0.19,
"taxTotal": 190.0,
"grossTotal": 1190.0,
"lineItems": [
  { "sku": "NUT-10", "description": "Nuts", "qty": 500, "unitPrice": 2.0 }
]
},
"confidence": 0.61,
"rawText": "Duplicate submission of PA-7810\n...",
},
{
"invoiceld": "INV-C-001",
"vendor": "Freight & Co",
"fields": {
  "invoiceNumber": "FC-1001",
  "invoiceDate": "01.03.2024",
  "currency": "EUR",
  "poNumber": "PO-C-900",
  "netTotal": 1000.0,
  "taxRate": 0.19,
  "taxTotal": 190.0,
```

"grossTotal": 1190.0,

"lineItems": [

{ "sku": null, "description": "Transport charges", "qty": 1, "unitPrice": 1000.0 }

]

},

"confidence": 0.79,

"rawText": "Invoice: FC-1001\nPO: PO-C-900\n2% Skonto if paid within 10 days\n..."

},

{

"invoiceId": "INV-C-002",

"vendor": "Freight & Co",

"fields": {

"invoiceNumber": "FC-1002",

"invoiceDate": "10.03.2024",

"currency": "EUR",

"poNumber": "PO-C-900",

"netTotal": 1000.0,

"taxRate": 0.19,

"taxTotal": 190.0,

"grossTotal": 1190.0,

"lineItems": [

{ "sku": null, "description": "Seefracht / Shipping", "qty": 1, "unitPrice": 1000.0 }

]

},

"confidence": 0.73,

"rawText": "Invoice: FC-1002\nPO: PO-C-900\nService: Seefracht\n..."

```
},  
{  
    "invoiceld": "INV-C-003",  
    "vendor": "Freight & Co",  
    "fields": {  
        "invoiceNumber": "FC-1003",  
        "invoiceDate": "20.03.2024",  
        "currency": "EUR",  
        "poNumber": "PO-C-901",  
        "netTotal": 1020.0,  
        "taxRate": 0.19,  
        "taxTotal": 193.8,  
        "grossTotal": 1213.8,  
        "lineItems": [  
            { "sku": null, "description": "Transport charges", "qty": 1, "unitPrice": 1020.0 }  
        ]  
    },  
    "confidence": 0.77,  
    "rawText": "Invoice: FC-1003\nPO: PO-C-901\nSlight fuel surcharge applied\n..."  
},  
{  
    "invoiceld": "INV-C-004",  
    "vendor": "Freight & Co",  
    "fields": {  

```

```
"currency": "EUR",
"poNumber": "PO-C-901",
"netTotal": 1020.0,
"taxRate": 0.19,
"taxTotal": 193.8,
"grossTotal": 1213.8,
"lineItems": [
  { "sku": null, "description": "Transport charges", "qty": 1, "unitPrice": 1020.0 }
]
},
"confidence": 0.58,
"rawText": "Invoice: FC-1004\nPO: PO-C-901\nNote: delivery confirmation pending\n..."
}
]
```

2. purchase_orders.json (Full)

```
[
{
  "poNumber": "PO-A-050",
  "vendor": "Supplier GmbH",
  "date": "2024-01-05",
  "lineItems": [ { "sku": "WIDGET-001", "qty": 100, "unitPrice": 25.0 } ]
},
{
  "poNumber": "PO-A-051",
  "vendor": "Supplier GmbH",
```

```
"date": "2024-01-18",
"lineItems": [{"sku": "WIDGET-002", "qty": 20, "unitPrice": 25.0}]
},
{
"poNumber": "PO-B-110",
"vendor": "Parts AG",
"date": "2024-02-01",
"lineItems": [{"sku": "BOLT-99", "qty": 200, "unitPrice": 10.0}]
},
{
"poNumber": "PO-B-111",
"vendor": "Parts AG",
"date": "2024-03-01",
"lineItems": [{"sku": "NUT-10", "qty": 500, "unitPrice": 2.0}]
},
{
"poNumber": "PO-C-900",
"vendor": "Freight & Co",
"date": "2024-03-01",
"lineItems": [{"sku": "FREIGHT", "qty": 1, "unitPrice": 1000.0}]
},
{
"poNumber": "PO-C-901",
"vendor": "Freight & Co",
"date": "2024-03-15",
"lineItems": [{"sku": "FREIGHT", "qty": 1, "unitPrice": 1000.0}]
```

```
}
```

```
]
```

3. delivery_notes.json (Full)

```
[
```

```
{
```

```
    "dnNumber": "DN-A-123",
```

```
    "vendor": "Supplier GmbH",
```

```
    "poNumber": "PO-A-050",
```

```
    "date": "2024-01-10",
```

```
    "lineItems": [{ "sku": "WIDGET-001", "qtyDelivered": 95 }]
```

```
},
```

```
{
```

```
    "dnNumber": "DN-A-124",
```

```
    "vendor": "Supplier GmbH",
```

```
    "poNumber": "PO-A-051",
```

```
    "date": "2024-01-22",
```

```
    "lineItems": [{ "sku": "WIDGET-002", "qtyDelivered": 20 }]
```

```
},
```

```
{
```

```
    "dnNumber": "DN-B-205",
```

```
    "vendor": "Parts AG",
```

```
    "poNumber": "PO-B-110",
```

```
    "date": "2024-02-03",
```

```
    "lineItems": [{ "sku": "BOLT-99", "qtyDelivered": 200 }]
```

```
},
```

```
{
```

```
"dnNumber": "DN-B-206",
"vendor": "Parts AG",
"poNumber": "PO-B-111",
"date": "2024-03-02",
"lineItems": [{ "sku": "NUT-10", "qtyDelivered": 500 }]

},
{

"dnNumber": "DN-C-301",
"vendor": "Freight & Co",
"poNumber": "PO-C-900",
"date": "2024-03-02",
"lineItems": [{ "sku": "FREIGHT", "qtyDelivered": 1 }]

},
{

"dnNumber": "DN-C-302",
"vendor": "Freight & Co",
"poNumber": "PO-C-901",
"date": "2024-03-18",
"lineItems": [{ "sku": "FREIGHT", "qtyDelivered": 1 }]

}
]
```

4. human_corrections.json (Full)

```
[

{
    "invoiceId": "INV-A-001",
    "vendor": "Supplier GmbH",
```

```
"corrections": [  
    { "field": "serviceDate", "from": null, "to": "2024-01-01", "reason": "Leistungsdatum  
found in rawText" }  
,  
    "finalDecision": "approved"  
,  
    {  
        "invoiceld": "INV-A-003",  
        "vendor": "Supplier GmbH",  
        "corrections": [  
            { "field": "poNumber", "from": null, "to": "PO-A-051", "reason": "Only matching PO for  
vendor within 30 days and matching item WIDGET-002" },  
            { "field": "serviceDate", "from": null, "to": "2024-01-20", "reason": "Leistungsdatum  
found in rawText" }  
,  
            "finalDecision": "approved"  
,  
            {  
                "invoiceld": "INV-B-001",  
                "vendor": "Parts AG",  
                "corrections": [  
                    { "field": "grossTotal", "from": 2400.0, "to": 2380.0, "reason": "Raw text indicates totals  
already include VAT; extractor overestimated" },  
                    { "field": "taxTotal", "from": 400.0, "to": 380.0, "reason": "Recalculated from grossTotal  
and taxRate" }  
,  
                    "finalDecision": "approved"  
                ]  
            }  
        ]  
    }  
]
```

```
},
{
  "invoiceld": "INV-B-003",
  "vendor": "Parts AG",
  "corrections": [
    { "field": "currency", "from": null, "to": "EUR", "reason": "Currency appears in rawText" }
  ],
  "finalDecision": "approved"
},
{
  "invoiceld": "INV-C-001",
  "vendor": "Freight & Co",
  "corrections": [
    { "field": "discountTerms", "from": null, "to": "2% Skonto within 10 days", "reason": "Skonto terms in rawText" }
  ],
  "finalDecision": "approved"
},
{
  "invoiceld": "INV-C-002",
  "vendor": "Freight & Co",
  "corrections": [
    { "field": "lineItems[0].sku", "from": null, "to": "FREIGHT", "reason": "Vendor uses descriptions (Seefracht/Shipping) that map to FREIGHT" }
  ],
  "finalDecision": "approved"
}
```

