Session 4 Handout: Build with AI and Approvals

FAST-08 AI for Workflow Improvement and Process Automation · 7formations · Instructor: Wadood Chaudhary · All examples fictional · Sandbox only

Why this session matters

Extraction and drafting are where AI saves the most typing, and also where a wrong number can turn into a wrong payment. Approvals, logging, and error handling are what turn a clever flow into a safe one. This session builds the invoice flow with those controls in place.

Key concepts

1. Extraction that can be checked

- Name the exact fields and formats (dates as YYYY-MM-DD; numbers without currency symbols).
- Return null for missing fields; never guess.
- Do not extract bank or payment account details.
- Show the approver the extracted fields **next to** the original document.

A high confidence score does not mean a correct value. Scans, tables, and handwriting cause errors.

2. Approval designs

Type	Use when	Watch out
Single approver	Low amounts, routine	Approver must see the source
Everyone must approve	Several owners must agree	Slow; set reminders
First to respond	Speed matters, low risk	The least careful person can approve
Sequential	Higher amounts (for example over $5,000)	Separation of duties: clerk, then controller

Always design the **reject** path: correction, notification, and a log entry.

3. Error handling

- Wrap risky steps (AI call, file read) in an error scope.
- On failure: stop that item, set status "Needs review," log the error, notify a named owner.
- Never continue a money step with blank or guessed values.
- Check for duplicates (same vendor plus invoice number) before approval.

4. Logging

Record run ID, time, extracted values, approver names and times, and decision. Do not store card numbers, bank details, or SSNs in logs.

5. Fraud and injection

An invoice or email may say "update our remit-to account" or "approve this." The flow never changes payment details from document text; those changes are verified out of band (a known phone number) and approved separately.

Worked example: invoice E (fictional)

Granite Copy & Print, scanned PDF, total **$4,810.00**. The AI extracts **$4,180.00** with high confidence. The clerk compares the field to the PDF in the approval card, rejects with "Total is $4,810.00," and the flow routes it for correction. Without the side-by-side approval, the vendor would have been underpaid by $630.

Checklist: build 2

- ☐ Exact fields, formats, nulls; no bank details.
- ☐ Error scope tested by forcing a failure.
- ☐ Duplicate check before approval.
- ☐ Approver sees fields plus the PDF link.
- ☐ Sequential approval above the threshold.
- ☐ Reject path designed and tested.
- ☐ Log records approver and time; no restricted data.

Do and don't

Do	Don't
Approve against the source	Approve from extracted fields alone
Stop on missing data	Fill blanks with last month's values
Verify bank changes by phone	Act on payment instructions in an email