ASN4: Develop an automated tracer
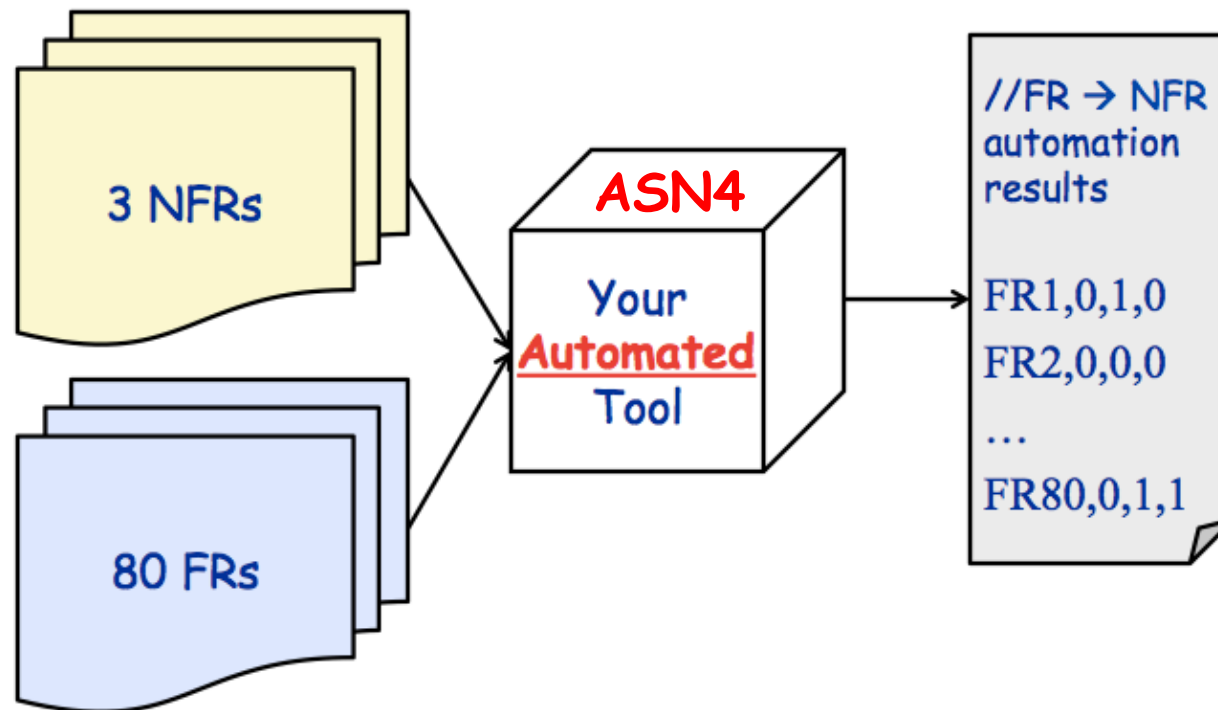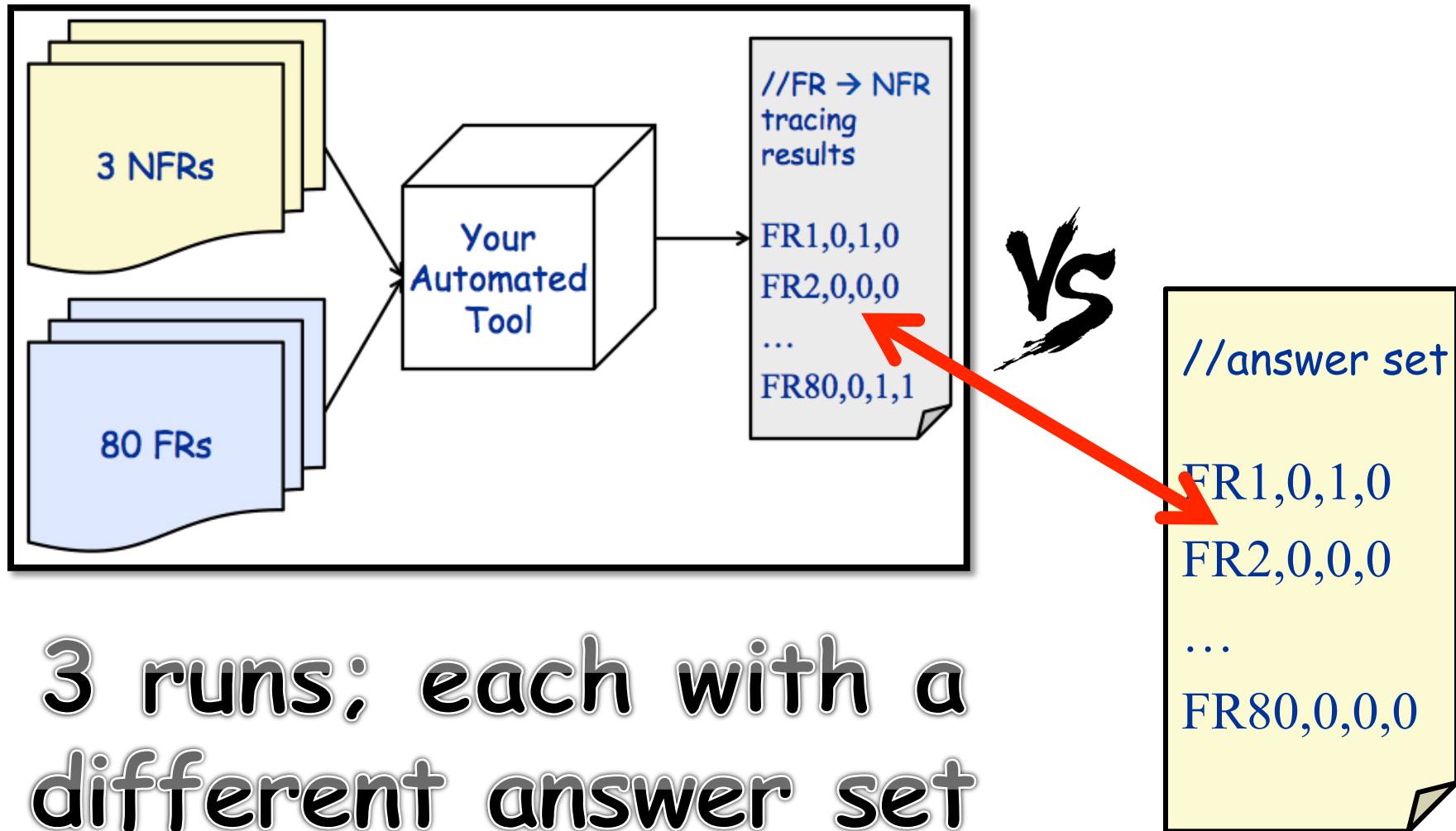
→ Deadline: having your ASN4 solution ready *before* 9am, Tuesday, July 26, 2022

ASN4 Performance Evaluation

3 runs; each with a different answer set

Evaluating Your ASN4 Solution

→The output of your ASN4 algorithm will be assessed via IR metrics

  ↳Recall, Precision, and F2

→Your ASN4 algorithm will be run three times in your 10-minute slot (July 26)

  ↳Run #1: 80 FRs and 3 NFRs

  ↳Run #2: 100 FRs and 3 NFRs (i.e., 20 new/ unseen FRs compared to Run #1)

  ↳Run #3: 100 FRs and 4 NFRs (i.e., 1 new/unseen NFR compared to Run #2)

ASN4 Grading: **Absolute** Criteria

(Recall ≥ 70%) and (Precision ≥ 30%)

➢ You'll receive 10 points if all of your 3 runs satisfy the above performance criteria

➢ You'll receive 7 points if 2 of your runs are good

➢ You'll receive 4 points if 1 of your runs is good

➢ You'll receive 1 point if you do your demo-grading

ASN4 Grading: **Absolute** Criteria

(Recall ≥ 70%) and (Precision ≥ 30%)

➢ You'll receive 10 points if all of your 3 runs satisfy the above performance criteria

➢ You'll receive 7 points if 2 of your runs are good

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Advancing Candidate Link Generation for Requirements Tracing: The Study of Methods

Jane Huffman Hayes, *Member, IEEE Computer Society*, Alex Dekhtyar, and
Senthil Karthikeyan Sundaram, *Student Member, IEEE*

Paper in the 'Readings' Content Area

TABLE 3
Classification of Results and Relationship between Measures and Requirements

Measure	Acceptable	Good	Excellent
Recall	60% — 69%	70% — 79%	80% – 100%
Precision	20% – 29%	30% – 49%	50% — 100%
Lag	3 – 4	2 — 3	0 — 2

ASN4 Grading: Relative Criteria

↳Run #1: 80 FRs and 3 NFRs

↳Run #2: 100 FRs and 3 NFRs (i.e., 20 new/ unseen FRs compared to Run #1)

↳Run #3: 100 FRs and 4 NFRs (i.e., 1 new/unseen NFR compared to Run #2)

$| F2(run2) - F2(run1) | / F2(run1) < 10\%$

$| F2(run3) - F2(run2) | / F2(run2) < 10\%$

➢ You'll receive 10 points if both relative criteria hold

➢ You'll receive 6 points if only one criterion holds

➢ You'll receive 2 points if you do your demo-grading