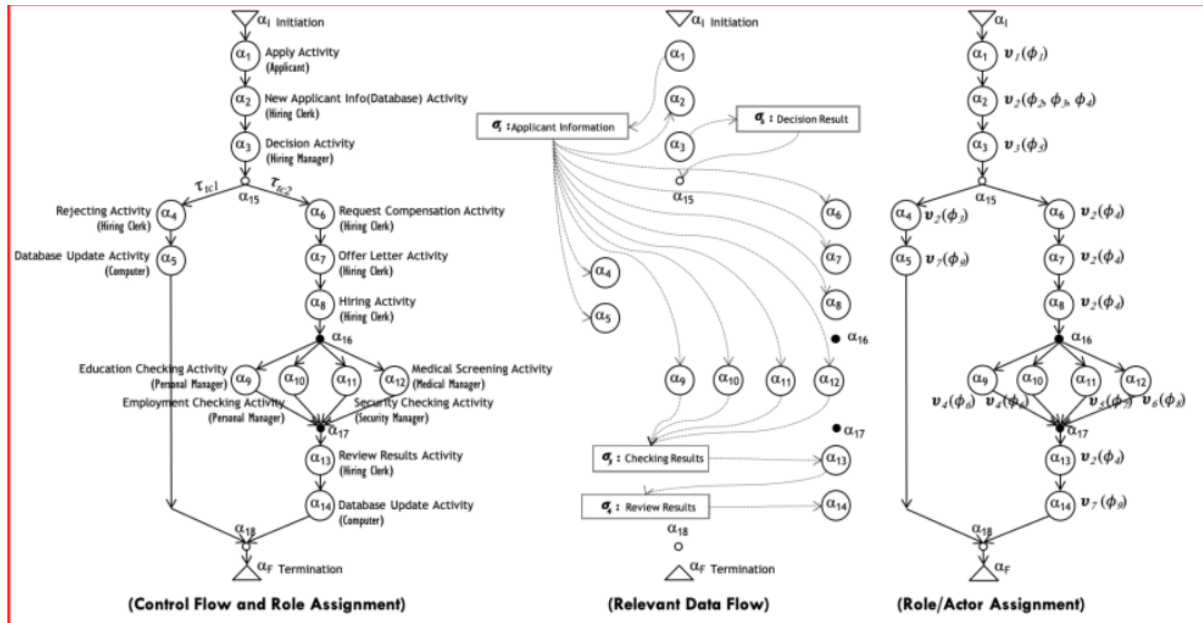


비즈니스 프로세스 관리 과제 1

컴퓨터공학부

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1. 직원채용처리 비즈니스 프로세스의 정보제어넷 모델에 대한 프로세스(제어흐름) 정의에 따른 액티비티선후행 함수($f : \delta$) 적용결과를 나타내시오.

$\delta = \delta p(U \delta s)$	$\delta = (\delta p U) \delta s$
$\delta p(\epsilon \text{ Initiation}) = \emptyset$; $\delta p(\alpha 1) = \{ \epsilon \text{ Initiation} \}$; $\delta p(\alpha 2) = \{ \alpha 1 \}$; $\delta p(\alpha 3) = \{ \alpha 2 \}$; $\delta p(\zeta \text{ xor- } \alpha 15) = \{ \alpha 3 \}$; $\delta p(\alpha 4) = \{ \zeta \text{ xor- } \alpha 15 \}$; $\delta p(\alpha 5) = \{ \alpha 4 \}$; $\delta p(\alpha 6) = \{ \zeta \text{ xor- } \alpha 15 \}$; $\delta p(\alpha 7) = \{ \alpha 6 \}$; $\delta p(\alpha 8) = \{ \alpha 7 \}$; $\delta p(\zeta \text{ and- } \alpha 16) = \{ \alpha 8 \}$; $\delta p(\alpha 9) = \{ \zeta \text{ and- } \alpha 16 \}$; $\delta p(\alpha 10) = \{ \zeta \text{ and- } \alpha 16 \}$; $\delta p(\alpha 11) = \{ \zeta \text{ and- } \alpha 16 \}$; $\delta p(\alpha 12) = \{ \zeta \text{ and- } \alpha 16 \}$; $\delta p(\zeta \text{ and- } \alpha 17) = \{ \alpha 9, \alpha 10, \alpha 11, \alpha 12 \}$; $\delta p(\alpha 13) = \{ \zeta \text{ and- } \alpha 17 \}$; $\delta p(\alpha 14) = \{ \alpha 13 \}$; $\delta p(\zeta \text{ xor- } \alpha 18) = \{ \alpha 5, \alpha 14 \}$; $\delta p(\epsilon \text{ Termination}) = \{ \zeta \text{ xor- } \alpha 18 \}$;	$\delta s(\epsilon \text{ Initiation}) = \{ \alpha 1 \}$; $\delta s(\alpha 1) = \{ \alpha 2 \}$; $\delta s(\alpha 2) = \{ \alpha 3 \}$; $\delta s(\alpha 3) = \{ \zeta \text{ xor- } \alpha 15 \}$; $\delta s(\zeta \text{ xor- } \alpha 15) = \{ \alpha 4, \alpha 6 \}$; $\delta s(\alpha 4) = \{ \alpha 5 \}$; $\delta s(\alpha 5) = \{ \zeta \text{ xor- } \alpha 18 \}$; $\delta s(\alpha 6) = \{ \alpha 7 \}$; $\delta s(\alpha 7) = \{ \alpha 8 \}$; $\delta s(\alpha 8) = \{ \zeta \text{ and- } \alpha 16 \}$; $\delta s(\zeta \text{ and- } \alpha 16) = \{ \alpha 9, \alpha 10, \alpha 11, \alpha 12 \}$; $\delta s(\alpha 9) = \{ \zeta \text{ and- } \alpha 17 \}$; $\delta s(\alpha 10) = \{ \zeta \text{ and- } \alpha 17 \}$; $\delta s(\alpha 11) = \{ \zeta \text{ and- } \alpha 17 \}$; $\delta s(\alpha 12) = \{ \zeta \text{ and- } \alpha 17 \}$; $\delta s(\zeta \text{ and- } \alpha 17) = \{ \alpha 13 \}$; $\delta s(\alpha 13) = \{ \alpha 14 \}$; $\delta s(\alpha 14) = \{ \zeta \text{ xor- } \alpha 18 \}$; $\delta s(\zeta \text{ xor- } \alpha 18) = \{ \epsilon \text{ Termination} \}$; $\delta s(\epsilon \text{ Termination}) = \emptyset$;

2. 직원채용처리 비즈니스 프로세스의 정보제어넷 모델에 대한 프로세스(제어흐름) 정의에 따른 천이조건선후행 함수($f : \chi$) 적용결과를 나타내시오.

$X = \chi p(U \chi s)$	$X = (\chi p U) \chi s$
$\chi p(\epsilon \text{ Initiation}) = \emptyset$; $\chi p(\alpha 1) = \{ Tdefault \}$; $\chi p(\alpha 2) = \{ Tdefault \}$; $\chi p(\alpha 3) = \{ Tdefault \}$; $\chi p(\zeta xor- \alpha 15) = \{ Tdefault \}$; $\chi p(\alpha 4) = \{ Ttc1 \}$; $\chi p(\alpha 5) = \{ Tdefault \}$; $\chi p(\alpha 6) = \{ Ttc2 \}$; $\chi p(\alpha 7) = \{ Tdefault \}$; $\chi p(\alpha 8) = \{ Tdefault \}$; $\chi p(\zeta and- \alpha 16) = \{ Tdefault \}$; $\chi p(\alpha 9) = \{ Tdefault \}$; $\chi p(\alpha 10) = \{ Tdefault \}$; $\chi p(\alpha 11) = \{ Tdefault \}$; $\chi p(\alpha 12) = \{ Tdefault \}$; $\chi p(\zeta and- \alpha 17) = \{ Tdefault \}$; $\chi p(\alpha 13) = \{ Tdefault \}$; $\chi p(\alpha 14) = \{ Tdefault \}$; $\chi p(\zeta xor- \alpha 18) = \{ Tdefault \}$; $\chi p(\epsilon \text{ Termination}) = \{ Tdefault \}$;	$X s(\epsilon \text{ Initiation}) = \{ Tdefault \}$; $X s(\alpha 1) = \{ Tdefault \}$; $X s(\alpha 2) = \{ Tdefault \}$; $X s(\alpha 3) = \{ Ttc1, Ttc2 \}$; $X s(\zeta xor- \alpha 15) = \{ Tdefault \}$; $X s(\alpha 4) = \{ Tdefault \}$; $X s(\alpha 5) = \{ Tdefault \}$; $X s(\alpha 6) = \{ Tdefault \}$; $X s(\alpha 7) = \{ Tdefault \}$; $X s(\alpha 8) = \{ Tdefault \}$; $X s(\zeta and- \alpha 16) = \{ \alpha 9, \alpha 10, \alpha 11, \alpha 12 \}$; $X s(\alpha 9) = \{ Tdefault \}$; $X s(\alpha 10) = \{ Tdefault \}$; $X s(\alpha 11) = \{ Tdefault \}$; $X s(\alpha 12) = \{ Tdefault \}$; $X s(\zeta and- \alpha 17) = \{ Tdefault \}$; $X s(\alpha 13) = \{ Tdefault \}$; $X s(\alpha 14) = \{ Tdefault \}$; $X s(\zeta xor- \alpha 18) = \{ Tdefault \}$; $X s(\epsilon \text{ Termination}) = \emptyset$;

3. 직원채용처리 비즈니스 프로세스의 정보제어넷 모델에 대한 연관데이터(데이터흐름) 정의에 따른 연관데이터입출력 함수($f : \rho$) 적용결과를 나타내시오.

ρi	ρo
$\rho i(\alpha 1) = \emptyset$; $\rho i(\alpha 2) = \{ \sigma 1 \}$; $\rho i(\alpha 3) = \emptyset$; $\rho i(\alpha 4) = \{ \sigma 1 \}$; $\rho i(\alpha 5) = \{ \sigma 1 \}$; $\rho i(\alpha 6) = \{ \sigma 1 \}$; $\rho i(\alpha 7) = \{ \sigma 1 \}$; $\rho i(\alpha 8) = \{ \sigma 1 \}$; $\rho i(\alpha 9) = \{ \sigma 1 \}$; $\rho i(\alpha 10) = \{ \sigma 1 \}$; $\rho i(\alpha 11) = \{ \sigma 1 \}$; $\rho i(\alpha 12) = \{ \sigma 1 \}$; $\rho i(\alpha 13) = \{ \sigma 3 \}$; $\rho i(\alpha 14) = \{ \sigma 4 \}$;	$\rho o(\alpha 1) = \{ \sigma 1 \}$; $\rho o(\alpha 2) = \emptyset$; $\rho o(\alpha 3) = \{ \sigma 2 \}$; $\rho o(\alpha 4) = \emptyset$; $\rho o(\alpha 5) = \emptyset$; $\rho o(\alpha 6) = \emptyset$; $\rho o(\alpha 7) = \emptyset$; $\rho o(\alpha 8) = \emptyset$; $\rho o(\alpha 9) = \{ \sigma 3 \}$; $\rho o(\alpha 10) = \{ \sigma 3 \}$; $\rho o(\alpha 11) = \{ \sigma 3 \}$; $\rho o(\alpha 12) = \{ \sigma 3 \}$; $\rho o(\alpha 13) = \{ \sigma 4 \}$; $\rho o(\alpha 14) = \emptyset$;

4. 직원채용처리 비즈니스 프로세스의 정보제어넷 모델에 대한 연관 데이터(데이터흐름) 정의에 따른 액티버티입출력 함수($f : \beta$) 적용결과를 나타내시오.

β_i	β_o
$\beta_i(\sigma_1) = \{ \alpha_2, \alpha_4, \alpha_5, \alpha_6, \alpha_7, \alpha_8, \alpha_9, \alpha_{10}, \alpha_{11}, \alpha_{12} \};$ $\beta_i(\sigma_2) = \emptyset ;$ $\beta_i(\sigma_3) = \{ \alpha_{13} \};$ $\beta_i(\sigma_3) = \{ \alpha_{14} \};$	$\beta_o(\sigma_1) = \{ \alpha_1 \};$ $\beta_o(\sigma_2) = \{ \alpha_3 \};$ $\beta_o(\sigma_3) = \{ \alpha_9, \alpha_{10}, \alpha_{11}, \alpha_{12} \};$ $\beta_o(\sigma_4) = \{ \alpha_{13} \};$

5. 직원채용처리 비즈니스 프로세스의 정보제어넷 모델에 대한 역할 및 수행자정의에 따른 역할할당 함수($f : \eta$) 적용결과를 나타내시오.

η_a	η_r
$\eta_a(\alpha_1) = \{ v_1 \};$ $\eta_a(\alpha_2) = \{ v_2 \};$ $\eta_a(\alpha_3) = \{ v_3 \};$ $\eta_a(\alpha_4) = \{ v_2 \};$ $\eta_a(\alpha_5) = \{ v_7 \};$ $\eta_a(\alpha_6) = \{ v_2 \};$ $\eta_a(\alpha_7) = \{ v_2 \};$ $\eta_a(\alpha_8) = \{ v_2 \};$ $\eta_a(\alpha_9) = \{ v_4 \};$ $\eta_a(\alpha_{10}) = \{ v_4 \};$ $\eta_a(\alpha_{11}) = \{ v_5 \};$ $\eta_a(\alpha_{12}) = \{ v_6 \};$ $\eta_a(\alpha_{13}) = \{ v_2 \};$ $\eta_a(\alpha_{14}) = \{ v_7 \};$	$\eta_r(v_1) = \{ \alpha_1 \};$ $\eta_r(v_2) = \{ \alpha_2, \alpha_4, \alpha_6, \alpha_7, \alpha_8, \alpha_{13} \};$ $\eta_r(v_3) = \{ \alpha_1 \};$ $\eta_r(v_4) = \{ \alpha_9, \alpha_{10} \};$ $\eta_r(v_5) = \{ \alpha_{11} \};$ $\eta_r(v_6) = \{ \alpha_{12} \};$ $\eta_r(v_7) = \{ \alpha_5, \alpha_{14} \};$

6. 직원채용처리 비즈니스 프로세스의 정보제어넷 모델에 대한 역할 및 수행자정의에 따른 수행자배정 함수($f : \lambda$) 적용결과를 나타내시오.

$\lambda = \lambda_r \cup \lambda_p$	$\lambda = (\lambda_r \cup) \lambda_p$
$\lambda_r(u1) = \{\emptyset1\};$	$\lambda_p(\emptyset1) = \{u1\};$
$\lambda_r(u2) = \{\emptyset2, \emptyset3, \emptyset4\};$	$\lambda_p(\emptyset2) = \{u2\};$
$\lambda_r(u3) = \{\emptyset5\};$	$\lambda_p(\emptyset3) = \{u2\};$
$\lambda_r(u4) = \{\emptyset6\};$	$\lambda_p(\emptyset4) = \{u2\};$
$\lambda_r(u5) = \{\emptyset7\};$	$\lambda_p(\emptyset5) = \{u3\};$
$\lambda_r(u6) = \{\emptyset8\};$	$\lambda_p(\emptyset6) = \{u4\};$
$\lambda_r(u7) = \{\emptyset9\};$	$\lambda_p(\emptyset7) = \{u5\};$
	$\lambda_p(\emptyset8) = \{u6\};$
	$\lambda_p(\emptyset9) = \{u7\};$