TIMER0 Driver for AVR Microcontrollers

Version: 1st **Date: 26/10/2023**

- **API specification**

1.1 Type definitions

Name:	Timer_mode
Type:	Enum
Element:	*normal,pwm,ctc,fast_pwm*
Description:	These are the return which mode you use

Name:	PWM_MODE
Type:	Enum
Element:	*non_invert,invert*
Description:	These are the return which mode of pwm you use

Name:	phase_MODE
Type:	Enum
Element:	*set,clear*

Description:	These are the return which mode of phase_mode you use

Name:	Timer_clock
Type:	Enum
Element:	*t_noClock,t_prescaler_1,t_prescaler_8 ,t_prescaler_64,t_prescaler_256,t_pres caler_1024,external_falling,external_r ising,*
Description:	These are the return which clock you use

Name:	TIMER_config
Type:	struct
Element:	uint16 initial_value; Timer_mode mod; Timer_clock prescaler; uint16 compare_value; PWM_MODE invert_mode; phase_MODE com_match;
Description:	These are timer config (mode,intial value,compare value,pwm_mode,phase_mode, clock)

2. Function definitions

Service name**:**	Timer0_init
Syntax:	void Timer0_init(TIMER_config * Config_Ptr);
Parameters (in):	pointer to struct (TIMER_congif)
Parameters (in/out):	none
Parameters (out):	none
Return value:	none
Description:	Initialize the Timer
NUM:	

Service name**:**	Timer0_deInit
Syntax:	void Timer0_deInit();
Parameters (in):	
Parameters (in/out):	None
Parameters (out):	None
Return value:	None
Description:	deinitialize the Timer

NUM:	

Service name:	Timer0_setCallBack
Syntax:	void Timer0_setCallBack(void(*a_ptr)(void))
Parameters (in):	
Parameters (in/out):	None
Parameters (out):	pointer to Call Back function
Return value:	None
Description:	Function to set the Call Back function address
NUM:	