

User					
id	First Name	Last Name	email	password	institution

Collection		
id	gal4s	user_id
	{gal4: [ ]}	belongs_to

Points			
id	user_id	create	edit
	belongs_to		

Gal4							
ID	name	version	p-element backbone	Gene name of regulatory elements	Ch. location ID	number of Gal4 copies inserted	
			selection	gene_id	[ ]	int	
has many expression profile				belongs_to Ch. location			

how to keep names unique?  
 -> puts: this name already exists  
 -> ask: is this a version of X? (link to x)  
 -> if not please refine name (e.g. twi-early-meso, twi-ap\_cells)

points & badge system		
id		

Chromosomal Location (or Hash?)	
ID	LOCATION
has many(gal4)	x
	2
	3
	4

location (tissue, organ, etc.)	
id	location
has many	

organ hierarchy? CV

stages (or hash?)		
id	stage	time
	1 - 17	AEL
	L1 - L3	AEL
	P1 - P15	APF
	Adult	

Expression Profile						
id	gal4_id	Start stage	end stage	location ID	method of assessment	image
	belongs_to	belongs_to	belongs_to	belongs_to		

Gal4_id Ref_id	

Genes (scrape sdb to validate name)				
id	name	symbol	link to sdb	link to flybase

References				
id	title	year	journal	link to pubmed

2 version 2

3 version 3