

# Integration principles

## Application to Agility

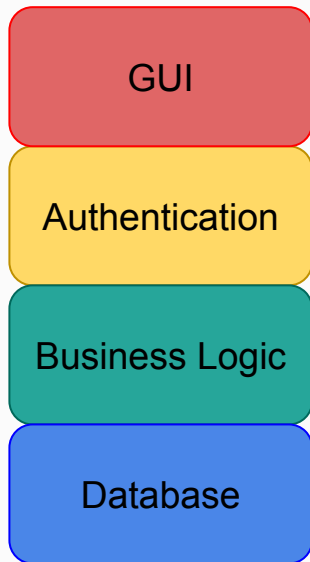
10/01/2017

Cécile Camillieri/Clément Duffau

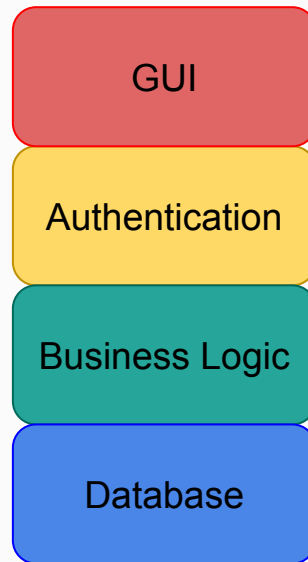


# State of play

Project 1

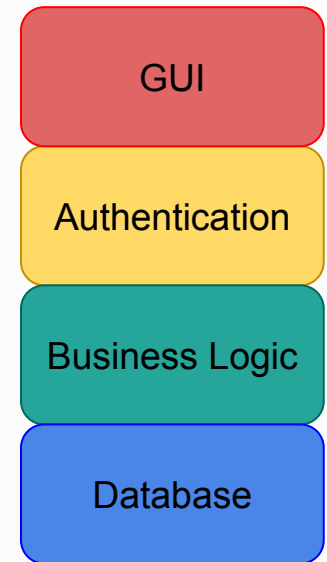


Project 2



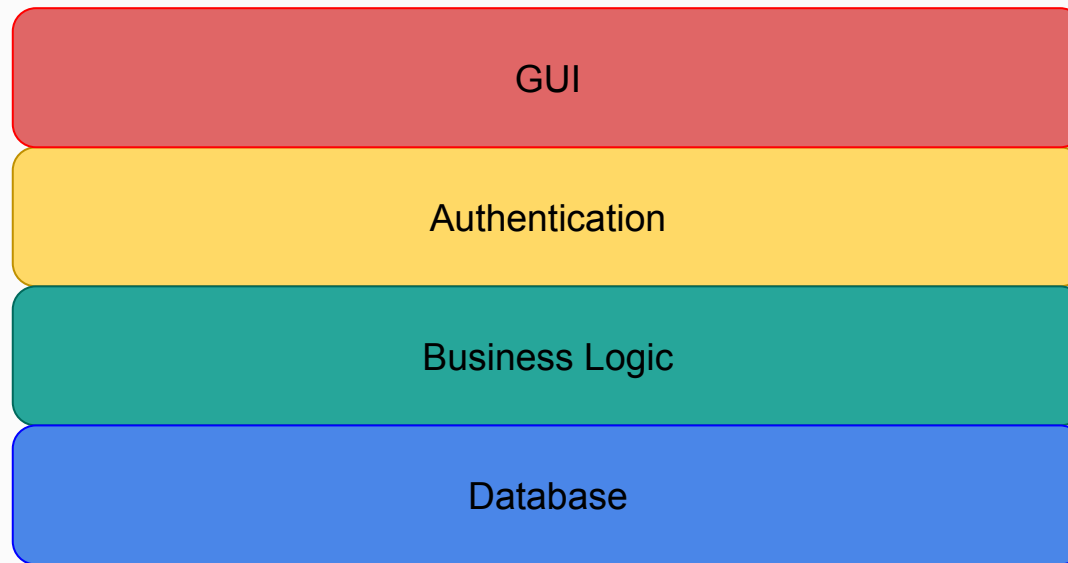
...

Project n



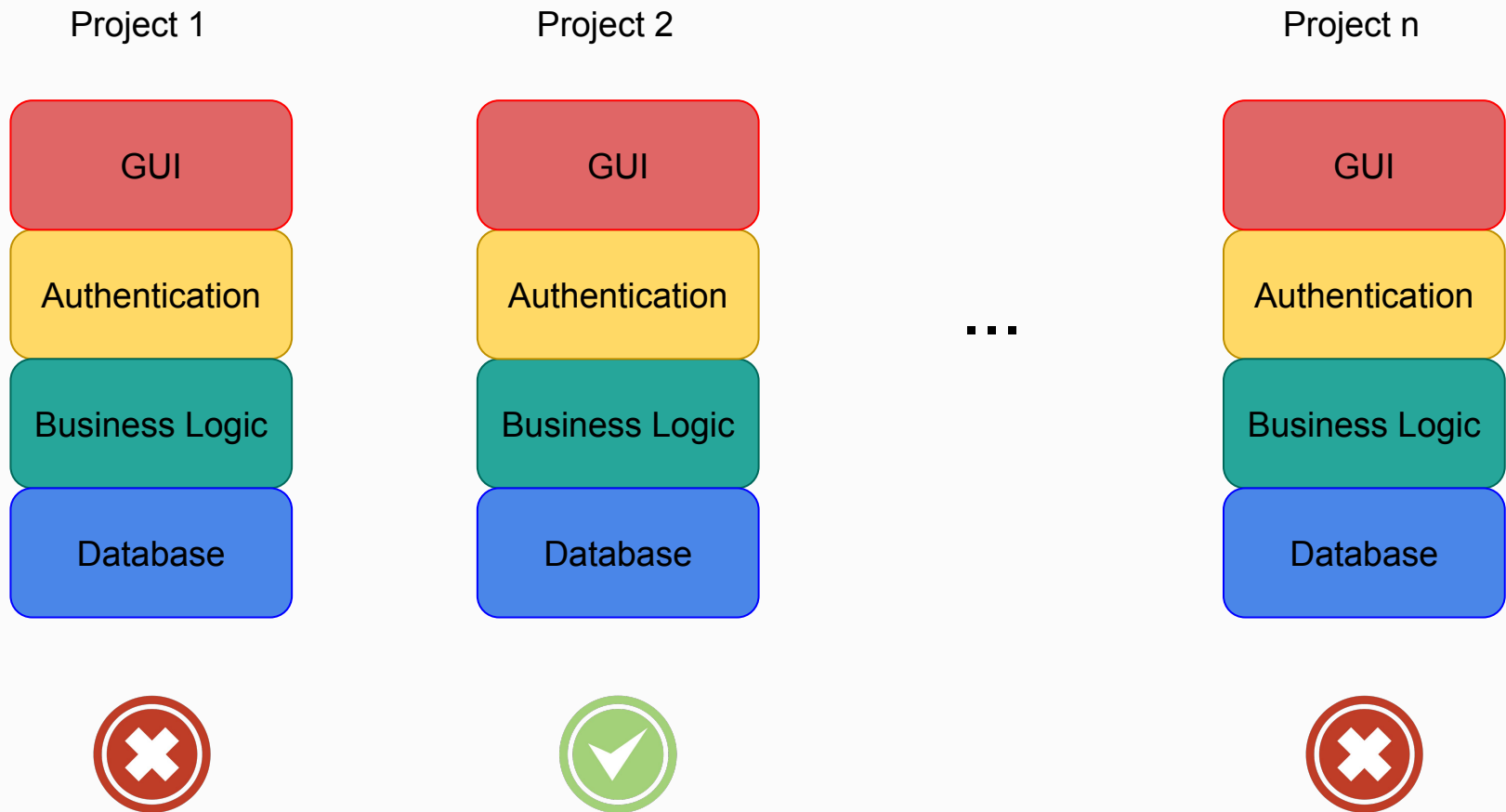
# At the end

Project

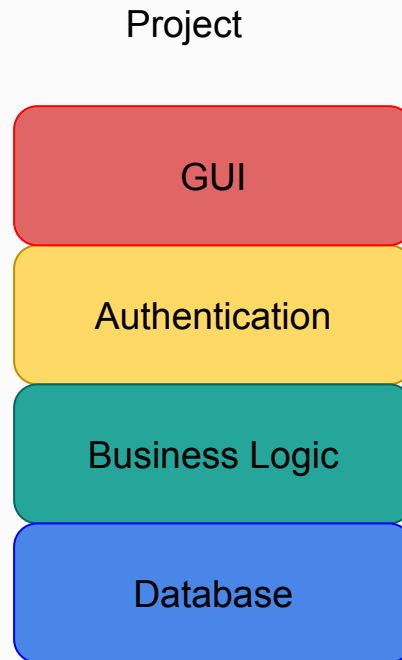


Different  
methods  
to do that

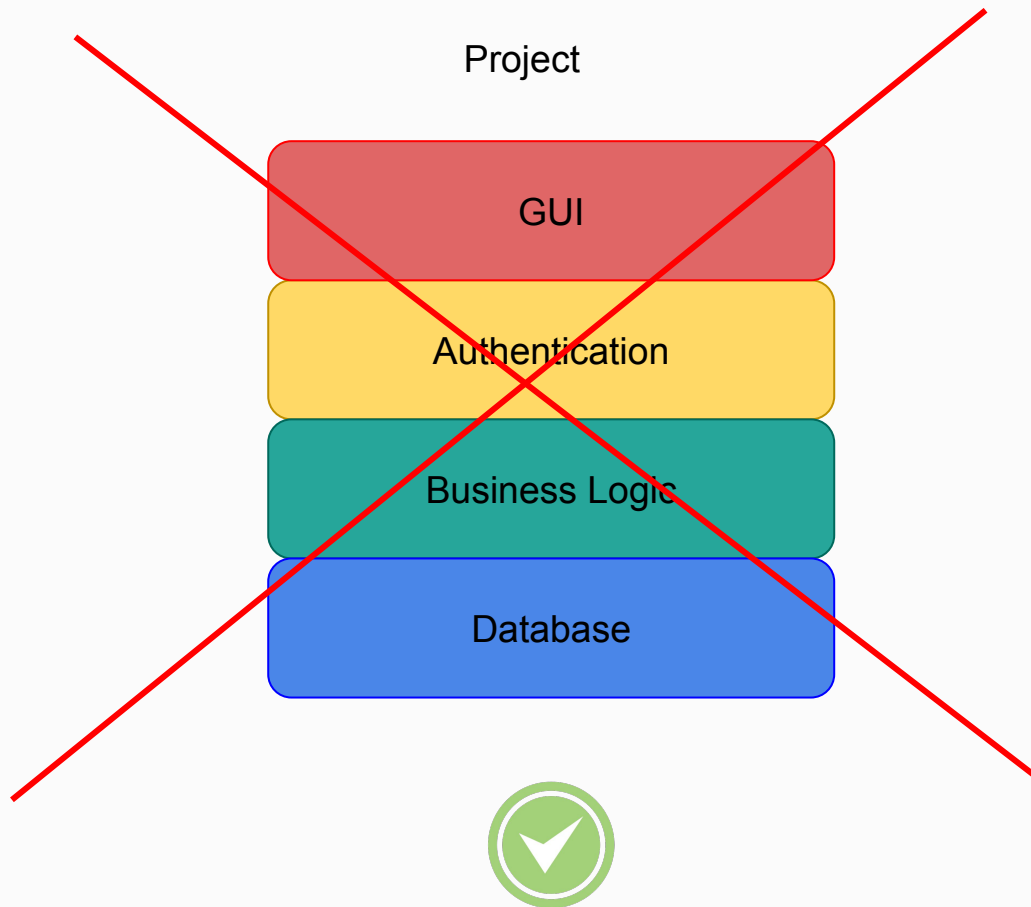
# The “no way to integrate” method



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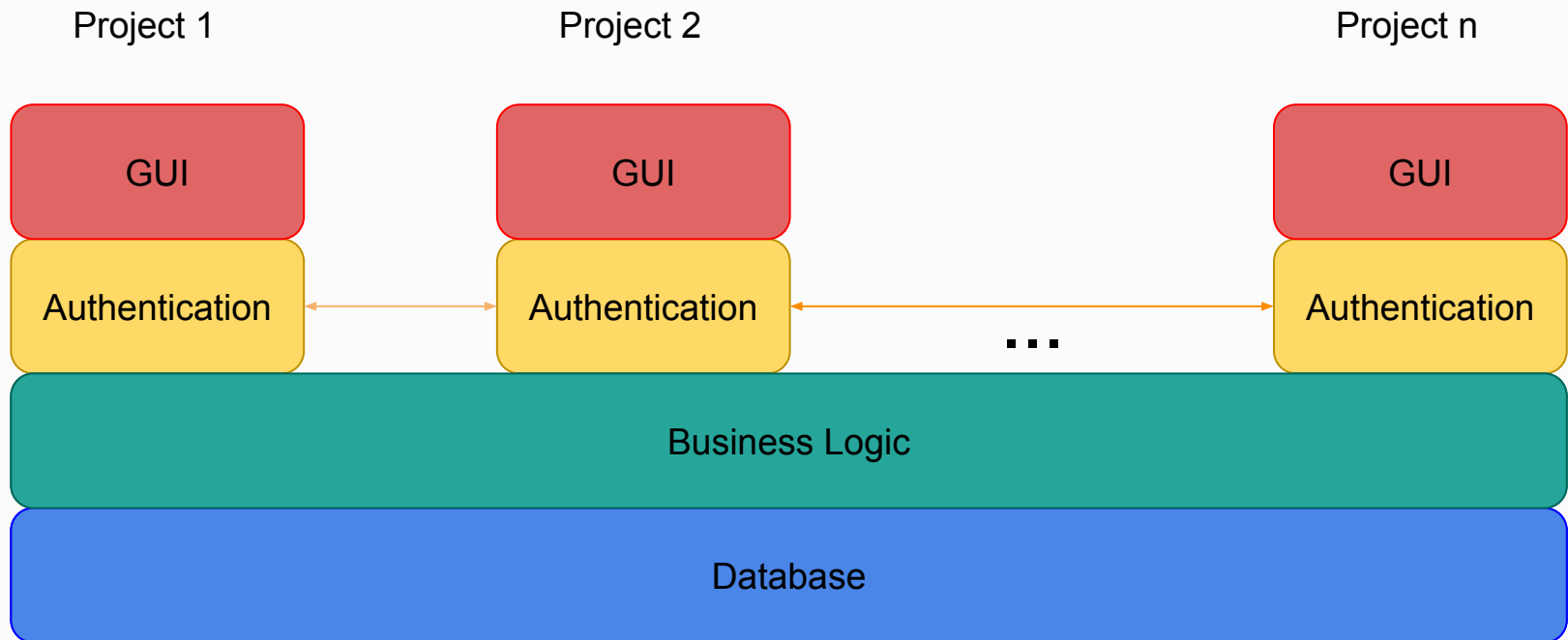
Costly

No reuse

Rediscussion  
about the  
client needs

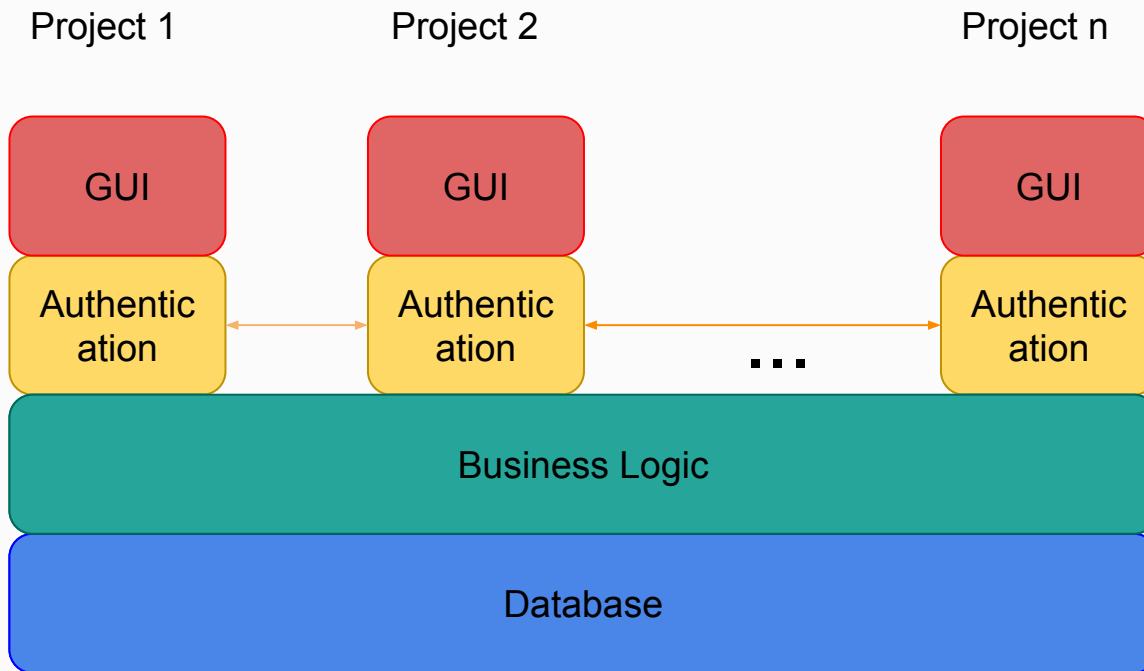
Not oriented  
continuous  
client value

# The “client will have to wait” method





# The “client have to wait” method



Very not oriented  
continuous client  
value

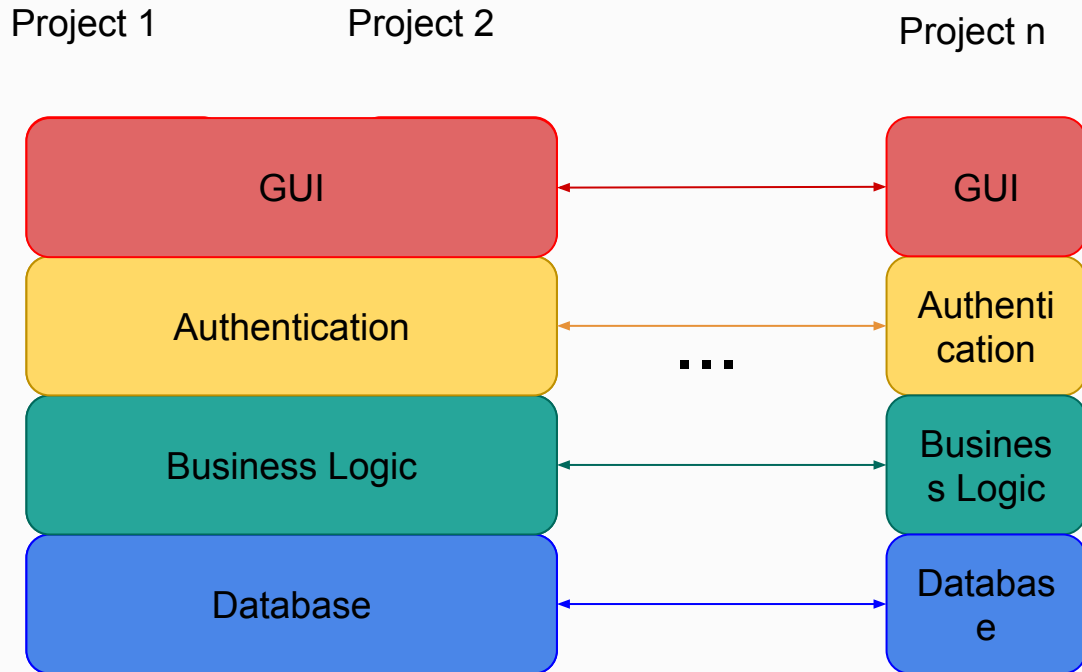
Risky integration

Costly

Reuse



# The “step by step” method

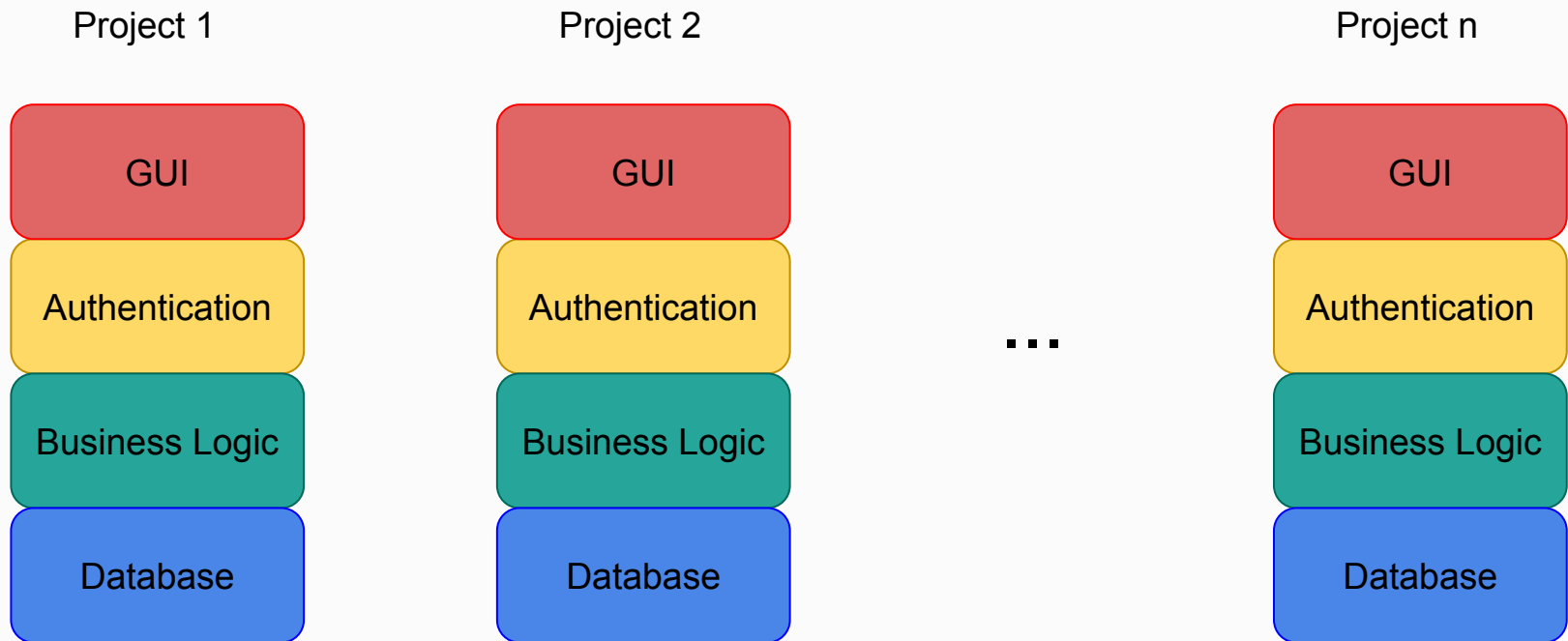


Oriented  
continuous client  
value

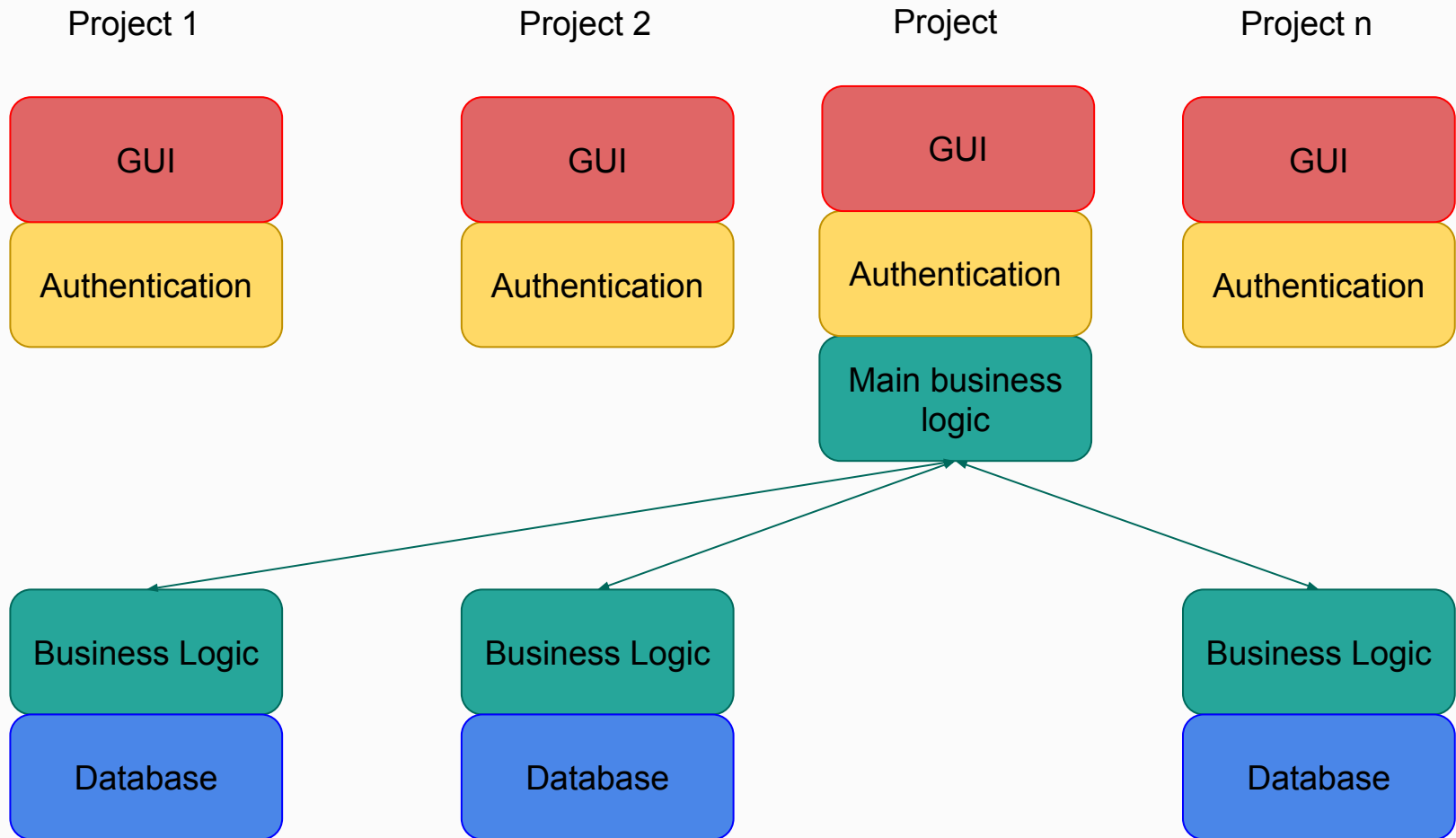
Risky integration

Reuse

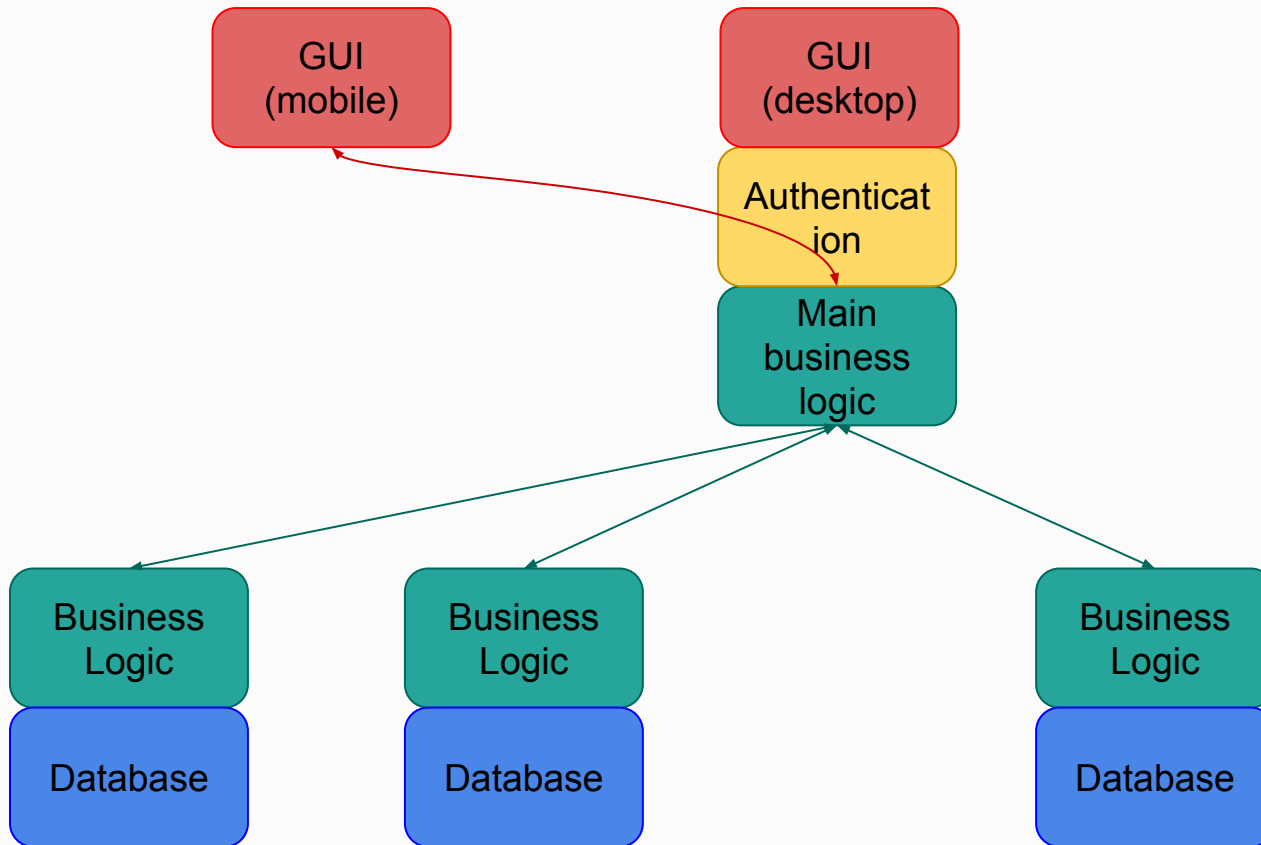
# The “service oriented” method



# The “service oriented” method



# The “service oriented” method



Oriented  
continuous client  
value

Low risky  
integration

Reuse

Evolutionary

# Example

```
/**
 * Created by Jordan Dejoux on 22/12/2016.
 */
public interface JoueurService {

    @GET
    @Path("/{idPartie}")
    @Produces(MediaType.APPLICATION_JSON)
    Response getJoueurs(@PathParam("idPartie") int idPartie, @QueryParam("token") String token);

    @GET
    @Path("/chef/{idEquipe}")
    @Produces(MediaType.APPLICATION_JSON)
    Response getChefEquipe(@PathParam("idEquipe") int idEquipe, @QueryParam("token") String token);

    @POST
    @Path("/position/{idJoueur}")
    @Produces(MediaType.APPLICATION_JSON)
    Response setPositionJoueur(@PathParam("idJoueur") String idJoueur, @FormParam("lat") double lat, @FormParam("lng") double lng);
}

/**
 * Interface pour un service web de gestion
 */
public interface AreaService {

    @GET
    @Produces(MediaType.APPLICATION_JSON)
    Response getAllAreas();

    @GET
    @Path("/capture/{areaId}")
    @Produces(MediaType.APPLICATION_JSON)
    Response getAreaGame(@PathParam("areaId") Integer areaId, @QueryParam("capturerId") String capturerId);

    @POST
    @Path("/capture/{areaId}")
    @Consumes(MediaType.APPLICATION_JSON)
    @Produces(MediaType.APPLICATION_JSON)
    Response captureArea(@PathParam("areaId") Integer areaId, @QueryParam("capturerId") String capturerId, String postParams);
}
```

# Integration tips for your project

1. Discuss between you at
  - a. conceptual level with UML
  - b. code level with service interface
2. Don't have to understand everything, just the interaction/integration point
3. You have designed the same main core, compare them. Choose the best or refactor one to be your good one
4. Don't do everything at the same time
  - a. Choose 2 services to integrate and work in pair
  - b. Integrate step by step and focus on client value



# Not a database course

- For the ones who have **not** legacy database, we give you the
  - database schema
  - mocked data
  
- Now, focus on what matters
  
- Here :  
<https://github.com/LP-IDSE-16-17/authentication-ws/tree/master/db>

(Thanks to Team A)

# Organize your sprints

- Think vertically
  - No client value at the end of a sprint = not the good way
- Multiple way of splitting the work, choose yours

Front-end oriented	Back-end oriented
1. GUI for mobile app with main core features	1. Iteratively integrate service and maintain desktop app
2. Iteratively integrate services	2. Portability to mobile app
3. Develop your own feature	3. Develop your own feature

