



# Top-down approach

# Top-down approach

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What's  
top-down  
approach?



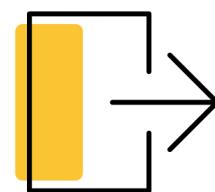
# Top-down approach

- A problem-solving or design methodology that starts with the general overview and gradually breaks it down into smaller and more detailed components.
- This approach is often used in various fields(software development, project management, ...)
- The idea is to begin with a high-level understanding and then progressively delve into finer details.

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Key steps in the  
top-down approach

# Key steps in the top-down approach



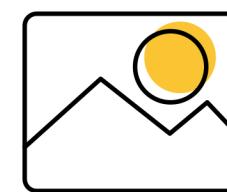
## 1. Define the Problem or Goal

- Clearly articulate the problem
- Understand the overall scope



## 2. Identify the Main Components

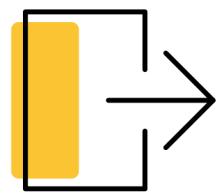
- Break down the problem
- These components should represent the major functionalities



## 3. Detail Each Component

- For each major component, break it down further into sub-components.
- Define the specific functions that each sub-component needs to perform.

# Key steps in the top-down approach



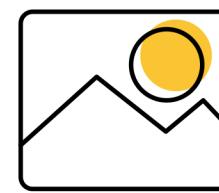
## 4. Continue the Breakdown

- Further detailed sub-components



## 5. Implement

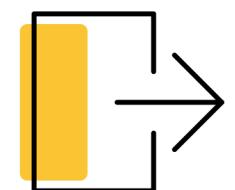
- Begin with the top-level components and gradually work your way down to the finer details.



## 6. Integration

- Integrate them to ensure that they work together seamlessly.
- Combining the lower-level components to build the complete

# Key steps in the top-down approach



## 7. Testing

- Further detailed sub-components.



## 8. Optimization

- Optimize the plan and solution.

# Benefits of Top-Down Approach



# Benefits of Top-Down Approach

## Holistic Understanding

Have entire scope before delving into details.

## Parallel Development

Subcomponents can be developed simultaneously

## Efficient Problem-Solving

Solving high-level issues before focusing on specifics.

## Clear Roadmap

Provides a clear roadmap, outlining the major components and their relationships.

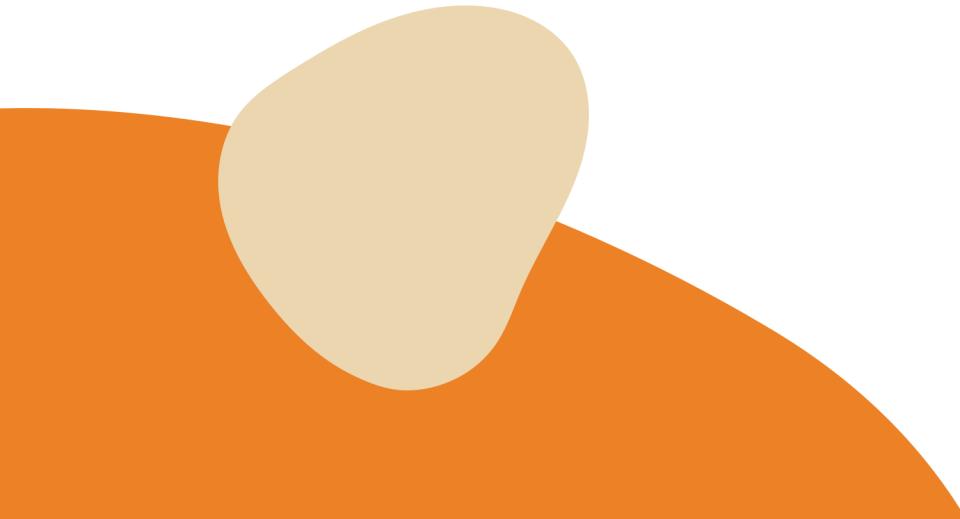
## Effective Communication

Ease of understanding and identification of key components

# Challenges



# Challenges



Adaptability to Changes

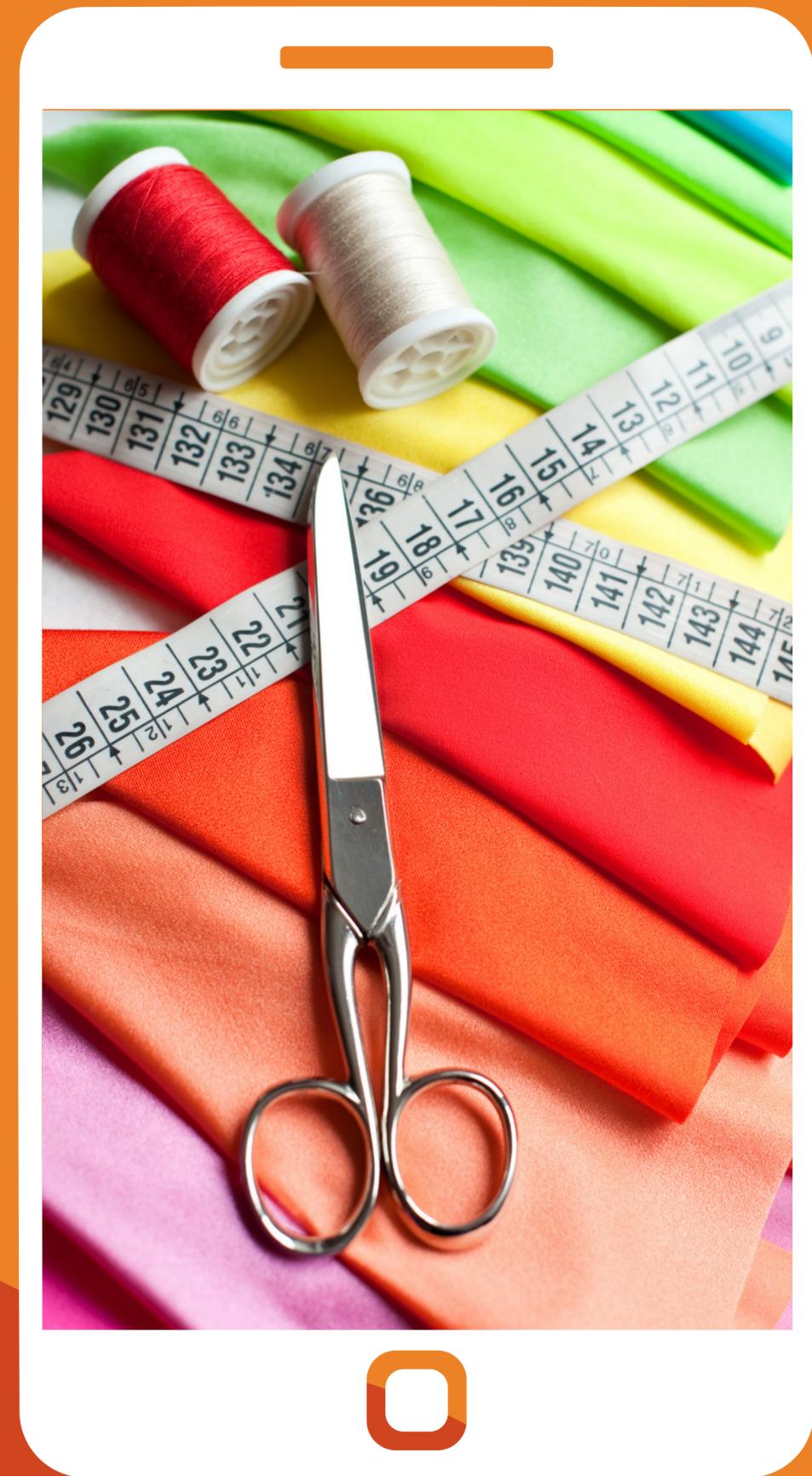
Modifications to the high-level design may adjustments throughout the entire structure.

Limited Detail in Initial Stages

The focus on high-level components initially may result in limited attention to finer details.

Balancing Detail and Overview

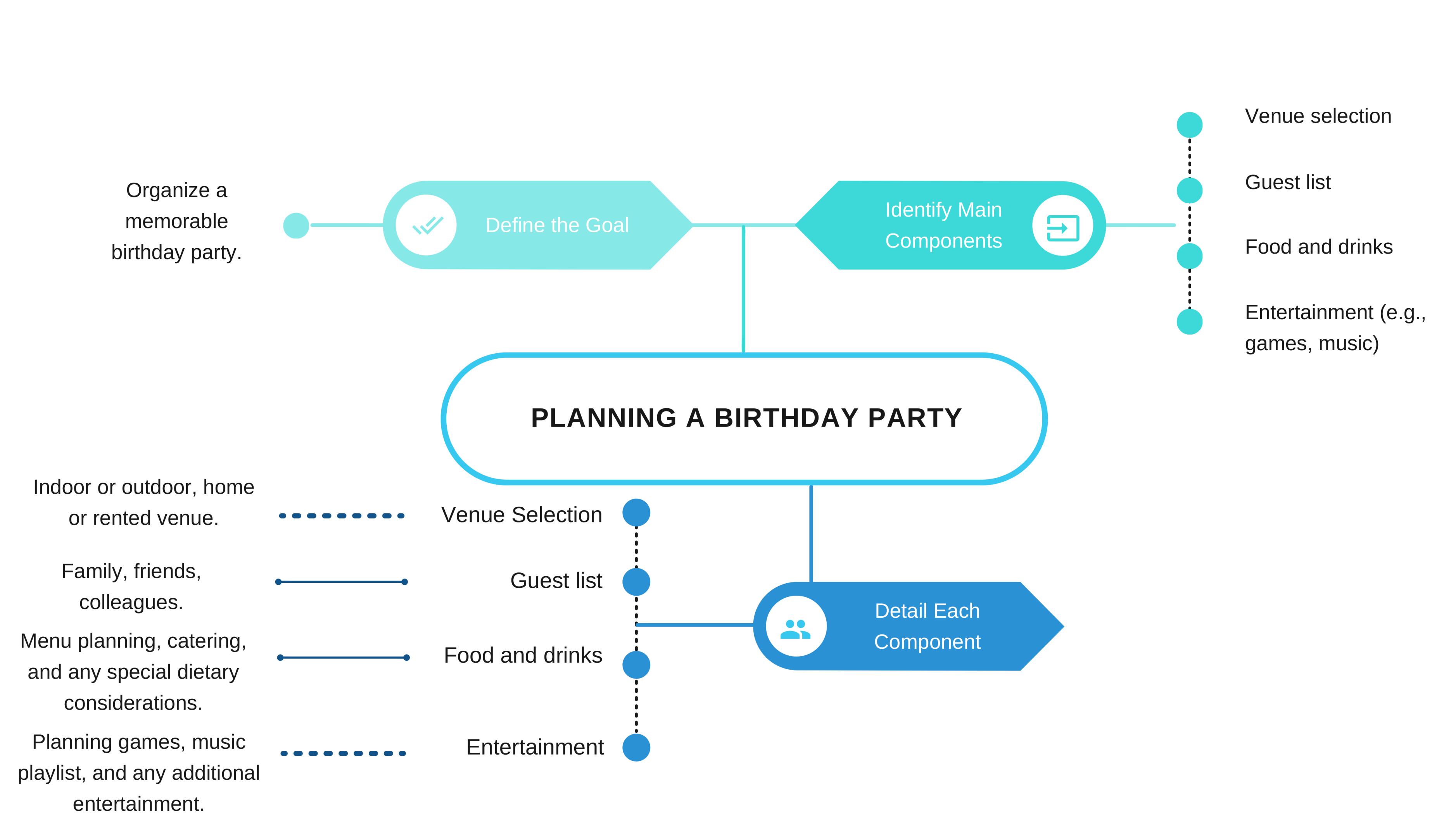
Having the right balance between maintaining overview and detailed components.

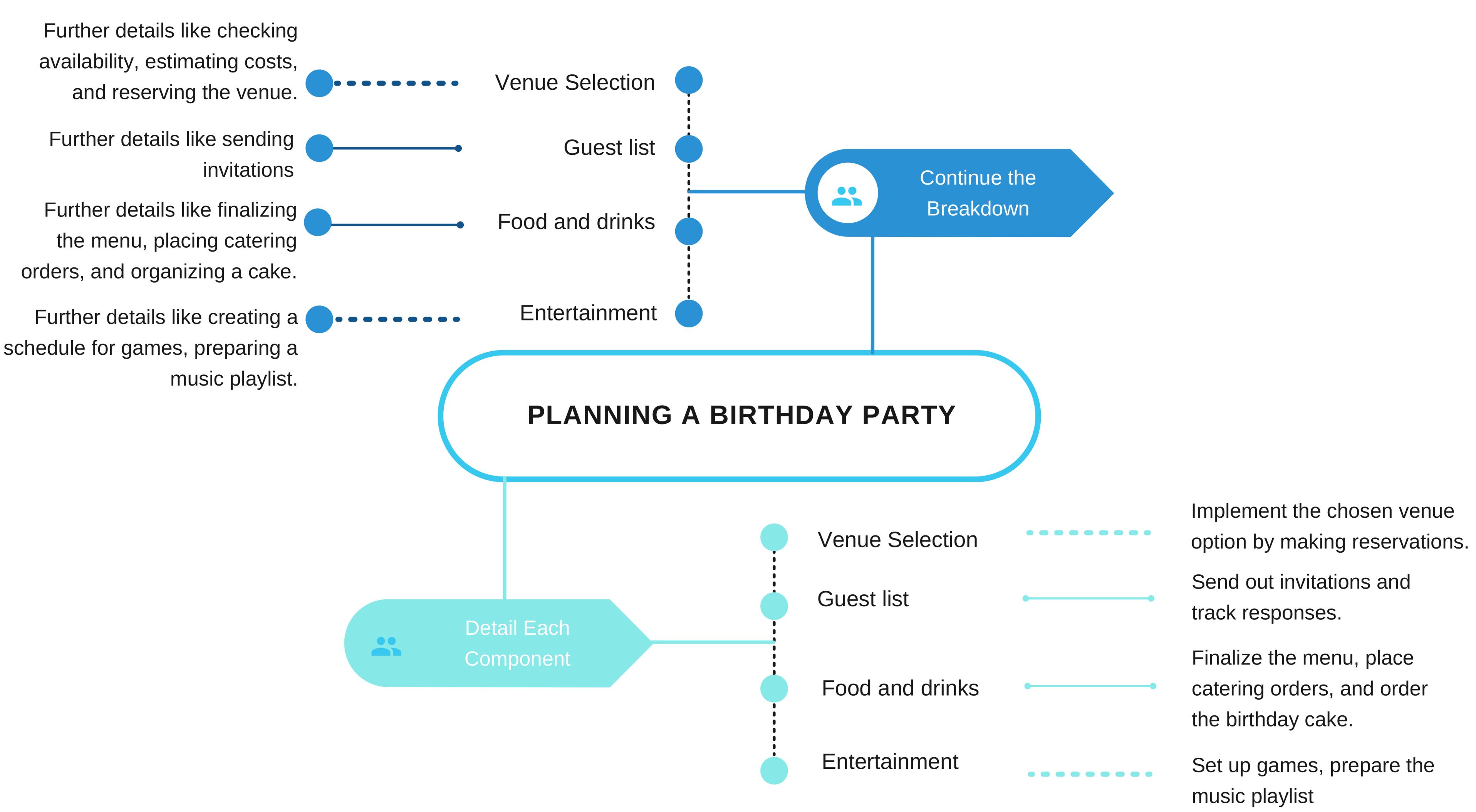


# Example

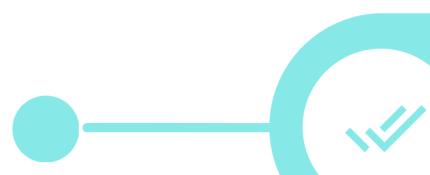
# Planning a birthday party

Goal: Organize a memorable birthday party





Bring together all the planned components to create a cohesive birthday party plan.



### Integration

### Testing



Run through a checklist to ensure all elements are in place and troubleshoot any last-minute issues.

## PLANNING A BIRTHDAY PARTY

Optimize the plan by refining details and making any necessary adjustments



### Optimization

# Thank you!

Write a closing statement or call-to-action here.