# **Zhift API**

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# **Error JSON:**

{Status, Name, Message}

# Organization

URIs relative to /org, unless otherwise noted:

Metho d	HTTP request	Description
POST	1	Creates an organization with a given unique name.
	Request Body: { name: "ORG_NAME" }	Response: Organization JSON.  Success: { _id: AUTOGENERATED, name: "ORG_NAME"}  Failure: Error JSON  1. Given name is not unique
GET	/:name	Retrieves the organization object with a given name.
	Request Body: {}	Response: Organization JSON.  Success: { _id: AUTOGENERATED, name: name}

# Failure:

- 1. Organization with given ID does not exist
  - Status:
  - Name: Bad Input
  - **Message**: An organization with that ID does not exist!
- 2. Unable to get mongo object
  - Status:
  - Name: Server failure
  - Message: Unable to process request

# Schedule

URIs relative to /schedule, unless otherwise noted:

Method	HTTP request	Description
POST	Request Body: { org:   "Applebee's",   role: "Cashier" }	Creates a new schedule with a unique role name associated with an existing organization  Response: Schedule JSON.  Success: { _id: AUTOGENERATED, org: "Applebee's", role: "Cashier"}  Failure: Error JSON  1. Organization with given name does not exist  • Status:  • Name: Bad Input  • Message: Cannot create schedule: An organization with that name does not exist!  2. A Schedule with that role already exists  • Status:  • Name: Bad Input  • Message: Cannot create schedule: A schedule with this role already exists  3. Request is not from a manager of the org  • Status:  • Name: Invalid permissions  • Message: You do not have permission to add a schedule to this organization  4. Unable to get mongo object  • Status:  • Name: Server failure  • Message: Unable to process request
PUT	/delete/:id  Request Body:	Removes a schedule with the given id.  Response: JSON.

	{}	Success: {}  Failure: Error JSON  1. Schedule with given ID does not exist  • Status:  • Name: Bad Input  • Message: Cannot remove schedule: Schedule with given ID does not exist  2. Request is not from a manager of the org  • Status:  • Name: Invalid permissions  • Message: You do not have permission to remove a schedule to this organization  3. Unable to remove mongo object  • Status:  • Name: Server failure  • Message: Unable to process request
GET	/:id	Gets a new schedule with the given id  Response: Schedule JSON.  Success: { _id: id, org: "Applebee's", role: "Cashier"}  Failure: Error JSON  1. Schedule with given ID does not exist

		<ul> <li>3. Unable to get mongo object</li> <li>Status:</li> <li>Name: Server failure</li> <li>Message: Unable to process request</li> </ul>
GET	/all/:orgName	Gets all the schedules associated with an organization of given name (used as id)
		Response: JSON.
		Success: {schedules: [
		{ _id: AUTOGENERATED, org: orgName, role: "Chefs"},
		Failure: Error JSON
		<ul> <li>Organization with given ID does not exist</li> <li>Status:</li> <li>Name: Bad Input</li> <li>Message: An organization with that ID does not exist!</li> </ul>
		<ul> <li>Request is not from a manager of the org</li> <li>Status:</li> <li>Name: Invalid permissions</li> <li>Message: You do not have permission to get all schedules of this organization</li> </ul>
		<ul><li>3. Unable to get mongo object</li><li>Status:</li><li>Name: Server failure</li></ul>
		<ul> <li>Message: Unable to process request</li> </ul>

**User**URIs relative to **/user**, unless otherwise noted:

Method	HTTP request	Description
POST	/manager  Request Body: { username: "Brad", email:  "brad@email.com", password: "xxx", org: "Applebee's" }	Creates a new manager for the given organization. User emails are unique within an organization  Response: Manager JSON.  Success: { _id: AUTOGENERATED, name: "Brad" email: "brad@email.com", org: "Applebee's" }  Failure: Error JSON  1. Username already exists

• Name: Server failure Message: Unable to process request POST /employee Creates a new employee for the given organization. Request Body: User emails are unique within an organization { username: "Sara", Response: Employee JSON. email: "sara@email.com", Success: password: "xxx", { id: AUTOGENERATED, org: "Applebee's", username: "Sara", role: "Cashier"} email: "sara@email.com", password: "xxx", org: "Applebee's", schedule: <"Cashier" Schedule ID>} Failure: Error JSON 1. Username already exists Status: • Name: Bad Input Message: Cannot create employee: A user in this organization already has this username! 2. Given organization does not exist Status: • Name: Bad Input Message: Cannot create employee: Organization does not exist! 3. Given shift does not exist Status: Name: Bad Input • **Message:** Cannot create employee: shift does not exist 4. Request is not from a manager of the org Status: • Name: Invalid permissions Message: You do not have permission to create and add a employee to this organization

5. Unable to create mongo object

Name: Server failure

Status:

		Message: Unable to process request
GET	/manager/:id  Request body: {}	Gets a manager object with given id  Response: Manager JSON.  Success: { _id: AUTOGENERATED, username: "vickyg", name: "Vicky" email: "vickyg@mit.edu", org: "Zhift" }  Failure: Error JSON  1. ID does not exist
GET	/employee/:id  Request body: {}	Gets a employee object with given id  Response: Employee JSON.  Success: { _id: AUTOGENERATED, username: "vickyg", name: "Vicky" email: "vickyg@mit.edu", org: "Zhift", schedule: <schedule id="">}  Failure:</schedule>

		<ul> <li>ID does not exist</li> <li>Status:</li> <li>Name: Bad Input</li> <li>Message: An employee with the given id does not exist</li> <li>Request is not from a user of the org</li> <li>Status:</li> <li>Name: Invalid permissions</li> <li>Message: You do not have permission to get this employee</li> </ul>
		<ul> <li>3. Unable to get mongo object</li> <li>Status:</li> <li>Name: Server failure</li> <li>Message: Unable to process request</li> </ul>
PUT	/manager/:id  Request Body: {}	Request to change password of manager with given id.  Response: JSON.  Success: {}  Failure: Error JSON  1. ID does not exist  • Status:  • Name: Bad Input  • Message: A manager with the given id does not exist  2. Request is not from owner or manager  • Status:  • Name: Invalid permissions  • Message: You do not have permission to edit this manager  3. Unable to get mongo object  • Status:  • Name: Server failure

PUT	/employee/:id  Request body: {}	Request to change password of employee with given id.  Response: JSON.  Success: {}  Failure: Error JSON  1. ID does not exist  • Status:  • Name: Bad Input  • Message: An employee with the given id does not exist  2. Request is not from owner or manager  • Status:  • Name: Invalid permissions  • Message: You do not have permission to edit this employee  3. Unable to get mongo object  • Status:  • Name: Server failure  • Message: Unable to process request
GET	/org/:id/manager  Request body: {}	Get all managers associated with the organization of the given id.  Response: JSON.  Success:  {managers: [

]}

### Failure:

Error JSON

- 1. Org ID does not exist
  - Status:
  - Name: Bad Input
  - **Message**: An organization with the given id does not exist
- 2. Request is not manager of organization
  - Status:
  - Name: Invalid permissions
  - Message: You do not have permission to get managers for this organization
- 3. Unable to get mongo object
  - Status:
  - Name: Server failure
  - Message: Unable to process request

### GET /

# /org/:id/employee

Get all employees associated with the organization of the given id.

# Request body:

{}

Response: JSON.

# Success:

# Failure:

Error JSON

- 1. Org ID does not exist
  - Status:
  - Name: Bad Input
  - Message: An organization with the given id does not exist
- 2. Request is not manager of organization
  - Status:
  - Name: Invalid permissions
  - Message: You do not have permission to get managers for this organization
- 3. Unable to get mongo object
  - Status:
  - Name: Server failure
  - Message: Unable to process request

# DELET E

# /:id

# Request Body:

{}

# Removes a user from the organization and from the database

Response: JSON.

# Success:



# Failure:

- 1. User ID does not exist
  - Status:
  - Name: Bad Input
  - Message: An user with the given id does not exist
- 2. Request is not manager of organization
  - Status:
  - Name: Invalid permissions
  - Message: You do not have permission to remove users for this organization
- 3. Unable to get mongo object
  - Status:
  - Name: Server failure
  - Message: Unable to process request

GET

/sched/:id/

Get all employees associated with a schedule with the given ID

Response: JSON.

# Success:

## Failure:

- 1. Schedule ID does not exist
  - Status:
  - Name: Bad Input
  - Message: A schedule with the given id does not exist
- 2. Request is not manager of organization
  - Status:
  - Name: Invalid permissions
  - Message: You do not have permission to get employees of a schedule for this organization
- 3. Unable to get mongo object
  - Status:
  - Name: Server failure
  - Message: Unable to process request

**Record**URIs relative to **/record**, unless otherwise noted:

	·	
Method	HTTP request	Description
GET	/:id	Gets a record with given id
	Request Body:	Response: Record JSON.
{}	{}	Success: { _id: AUTOGENERATED, schedule: <schedule id="">, content: "Person A traded shift 1 for Person B's shift 2" }</schedule>
		Failure: Error JSON
		<ul> <li>1. Record does not exist <ul> <li>Status:</li> <li>Name: Bad Input</li> <li>Message: Record with given id does not exist.</li> </ul> </li> <li>2. Request is not from either manager of this org, or user of this schedule. <ul> <li>Status:</li> <li>Name: Invalid permissions</li> <li>Message: You do not have</li> </ul> </li> </ul>
		permission to get this record  3. Unable to get mongo object  Status:  Name: Server failure  Message: Unable to process request

GET /sched/:sched id Gets all records associated with a schedule Response: JSON. Request Body: {} Success: {Records: [ { id: AUTOGENERATED, schedule: <Schedule ID>, content: "Person A traded shift 1 for Person B's shift 2" }, { id: AUTOGENERATED, schedule: <Schedule ID>, content: "Person C traded shift 3 for Person D's shift 4" }, ]} Failure: Error JSON 1. Schedule does not exist Status: • Name: Bad Input • Message: Schedule with given id does not exist.

- 2. Request is not from either manager of this org, or user of this schedule.
  - Status:
  - Name: Invalid permissions
  - Message: You do not have permission to get this record
- 3. Unable to get mongo object
  - Status:
  - Name: Server failure
  - Message: Unable to process request

**Template Shift**URIs relative to **/template**, unless otherwise noted:

Metho d	HTTP request	Description
POST	Request Body: { dayOfWeek: "Tuesday",  start: "MM:HH",  end: "MM:HH",  responsiblePerson: <employee id="">,  schedule: <schedule id=""> }</schedule></employee>	Creates a new template shift associated with a schedule.  Response: Template Shift JSON.  Success: { _id: AUTOGENERATED, dayOfWeek: "Tuesday", start: "MM:HH", end: "MM:HH", responsiblePerson: <employee id="">, schedule: <schedule id=""> }</schedule></employee>
GET	/all/:scheduleId  Request Body: {}	Get all template shifts associated with specified schedule.  Response: Multiple Template Shift JSON.  Success: [{_id: AUTOGENERATED, dayOfWeek: "Tuesday", start: "MM:HH", end: "MM:HH", responsiblePerson: <employee id="">, schedule: scheduleId } {_id: AUTOGENERATED, dayOfWeek: "Friday", start: "MM:HH", end: "MM:HH", end: "MM:HH", responsiblePerson: <employee id="">, schedule: scheduleId }]</employee></employee>

GET	/:id	Get template shift by id.
		Response: Template Shift JSON.
		Success: { _id: id, dayOfWeek: "Tuesday", start: "MM:HH", end: "MM:HH", responsiblePerson: <employee id="">, schedule: scheduleId }</employee>
DELET	/:id	Remove template shift by id.
E		Response: JSON.  Success: { _id: id,    dayOfWeek: "Tuesday",    start: "MM:HH",    end: "MM:HH",    responsiblePerson: <employee id="">,    schedule: scheduleId }</employee>
PUT	/reassign/:id	Reassign person responsible for existing template shift.
	Request Body: {employeeld: <employee id="">}</employee>	Response: Template Shift JSON.
		Success: { _id: id, dayOfWeek: "Tuesday", start: "MM:HH", end: "MM:HH", responsiblePerson: <employee id="">, schedule: scheduleId }</employee>

# Shift

URIs relative to /shift, unless otherwise noted:

Metho d	HTTP request	Description
d	Request Body: { dayOfWeek: "Tuesday",     start: String (HH:MM),     responsiblePerson: <employee id="">,     schedule: <schedule id="">,     dateScheduled: Date }</schedule></employee>	Creates a new actual shift associated with a schedule  Response: Shift JSON.  Success: { _id: AUTOGENERATED, dayOfWeek: "Tuesday", start: "MM:HH", end: "MM:HH", responsiblePerson: <employee id="">, schedule: <schedule id="">, dateScheduled: Date, upForGrabs: False, upForGwap: False}  Failure: Error JSON  1. Invalid day of week</schedule></employee>

		<ul> <li>Name: Server failure</li> <li>Message: Unable to process request</li> </ul>
GET	/:id	Get a shift by id.  Success: [     { _id: id, }     dayOfWeek: "Tuesday", start: "MM:HH", end: "MM:HH", responsiblePerson: userId, schedule: scheduleId, dateScheduled: Date, upForGrabs: True, upForSwap: False} ]
GET	/user/:id	Get all shifts associated with a user (specifically, an employee who is responsible for those shifts).  Success:  [
GET	/all/:id	Getting all shifts associated with a schedule.  Success: [ { _id: AUTOGENERATED,    dayOfWeek: "Tuesday",    start: "MM:HH",    end: "MM:HH",    responsiblePerson: <employee id="">,    schedule: scheduleId,</employee>

dateScheduled: Date, upForGrabs: True, upForSwap: False} 1 Failure: Error JSON 1. Schedule ID does not exist Status: • Name: Bad Input • Message: No actual schedule with ID exists 2. Request is not from user of schedule. Status: • Name: Invalid permissions Message: You do not have permission to put this shift up for grabs. 3. Unable to edit mongo object Status: • Name: Server failure Message: Unable to process request PUT /putUpForGrabs/:id Puts actual shift up for grabs Response: Shift JSON. **Request Body:** {} Success: { id: AUTOGENERATED, dayOfWeek: "Tuesday", start: "MM:HH", end: "MM:HH", responsiblePerson: <Employee Id>, schedule: <Schedule Id>, dateScheduled: Date. upForGrabs: True, upForSwap: False} Failure: Error JSON 1. Shift ID does not exist Status:

• Name: Bad Input Message: No actual shift with ID exists 2. Request is not from owner of shift. Status: • Name: Invalid permissions • Message: You do not have permission to put this shift up for grabs. 3. Unable to edit mongo object Status: • Name: Server failure Message: Unable to process request GET /upForGrabs/:id Getting all actual shifts associated with a schedule that is up for grabs **Request Body:** {} Success: { id: AUTOGENERATED, dayOfWeek: "Tuesday", start: "MM:HH", end: "MM:HH". responsiblePerson: <Employee Id>, schedule: <Schedule Id>, dateScheduled: Date, upForGrabs: True, upForSwap: False} 1 Failure: Error JSON Schedule ID does not exist 1. Status: • Name: Bad Input Message: No actual schedule with ID exists 2. Request is not from user of schedule. Status: • Name: Invalid permissions

Message: You do not have		
permission to put this shift up for		
grabs.		

- 3. Unable to edit mongo object
  - Status:
  - Name: Server failure
  - Message: Unable to process request

# PUT

/claim/:id

# **Request Body:**

{}

Claims an actual shift that is up for grabs for the user who is currently logged in

Response: Shift JSON.

# Success:

{ \_id: AUTOGENERATED, dayOfWeek: "Tuesday", start: "MM:HH",

end: "MM:HH",

responsiblePerson: <Employee Id>,

schedule: <Schedule Id>, dateScheduled: Date, upForGrabs: True, upForSwap: False}

### Failure:

- 1. Shift ID does not exist
  - Status:
  - Name: Bad Input
  - Message: No actual shift with ID exists
- 2. Shift is not up for grabs
  - Status:
  - Name: Bad Input
  - Message: This shift is not up for grabs
- 3. Request is not from employee of the same schedule.
  - Status:
  - Name: Invalid permissions
  - Message: You do not have permission to grab this shift.

	<ul> <li>4. Unable to edit mongo object</li> <li>Status:</li> <li>Name: Server failure</li> <li>Message: Unable to process request</li> </ul>
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**Swap**URIs relative to **/swap**, unless otherwise noted:

Method	HTTP request	Description
POST	1	Creates a swap object for the given shift id
	Request Body: {shift: <shift id="">,</shift>	Note: shift must be an actual shift
	schedule: <schedule_id>}</schedule_id>	Response: Swap JSON.
		Success: { shiftUpForSwap: <shiftid>     shiftOfferedInReturn: null,     Schedule: <scheduleid> }</scheduleid></shiftid>
		Failure: Error JSON
		<ul> <li>Shift ID does not exist</li> <li>Status:</li> <li>Name: Bad Input</li> <li>Message: Cannot create swap: Shift ID does not exist</li> <li>Shift is not an actual shift</li> <li>Status:</li> <li>Name: Bad Input</li> <li>Message: Cannot create swap: Shift is not an actual shift</li> <li>Request is not from a owner of the shift</li> <li>Status:</li> <li>Name: Invalid permissions</li> <li>Message: You do not have permission</li> </ul>
		to create a swap for this shift 4. Unable to create mongo object  • Status:

		<ul><li>Name: Server failure</li><li>Message: Unable to process request</li></ul>
GET	/:id  Request Body: {}	Getting all non-responded swap objects associated with a schedule
		Response: Swap JSON.
		Success: [     { shiftUpForSwap: <shift id=""></shift>
		}
		]
		Failure: Error JSON
		<ol> <li>Schedule ID does not exist         <ul> <li>Status:</li> <li>Name: Bad Input</li> <li>Message: Schedule ID does not exist</li> </ul> </li> <li>Request is not from a user of this schedule         <ul> <li>Status:</li> <li>Name: Invalid permissions</li> <li>Message: You do not have permission to create a swap for this shift</li> </ul> </li> <li>Unable to create mongo object         <ul> <li>Status:</li> <li>Name: Server failure</li> <li>Message: Unable to process request</li> </ul> </li> </ol>
PUT	/offerSwap	Another person offers a shift for this swap
	Request Body:	Response: Swap JSON.
	{userRequesting: <user id="">, SwapId: <swap id="">,</swap></user>	Success: { shiftUpForSwap: <shift id=""> shiftOfferedInReturn: <shift id="">,</shift></shift>

	ShiftOffered: <shift id="">}</shift>	Schedule: <scheduleid> }</scheduleid>
		Failure: Error JSON  1. Shift Offered ID does not exist  • Status:
		<ul> <li>Name: Bad Input</li> <li>Message: Shift ID does not exist</li> <li>User Requested ID does not exist</li> <li>Status:</li> <li>Name: Bad Input</li> <li>Message: User requested ID does not exist</li> </ul>
		<ul> <li>Swap ID does not exist</li> <li>Status:</li> <li>Name: Bad Input</li> <li>Message: Swap ID does not exist</li> <li>User is not owner of shift offered</li> <li>Status:</li> <li>Name: Invalid permissions</li> </ul>
		<ul> <li>Message: User cannot offer to swap given shift</li> <li>Request is not from a user of the same schedule         <ul> <li>Status:</li> <li>Name: Invalid permissions</li> <li>Message: You do not have permission to swap for this shift</li> </ul> </li> </ul>
		<ul> <li>6. Unable to create mongo object</li> <li>Status:</li> <li>Name: Server failure</li> <li>Message: Unable to process request</li> </ul>
DELET E	/:id	Deletes the swap object with given ID
<b>L</b>	Request Body: {}	Response: JSON.
		Success: {}
		Failure: Error JSON

- 1. Swap ID does not exist
  - Status:
  - Name: Bad Input
  - Message: Swap ID does not exist
- 2. Unable to remove mongo object
  - Status:
  - Name: Server failure
  - Message: Unable to process request